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Chances for creative talent in Parkstad Rotterdam

Urban regeneration in Rotterdam-Zuid based on
the development of a vital local creative economic cluster



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Preface

This is the thesis of Urbanism graduation project Chances for creative talent in Parkstad Rotterdam: Urban regeneration in Rotterdam-Zuid based on the development of a vital local creative economic cluster. This thesis is part of my graduation of the master tracks Architecture and Urbanism of the master Architecture, Urbanism and Buildings sciences at Delft University of Technology. This graduation project consists out of two parts: research and urban design on a part of Rotterdam-Zuid, and the design of a 'hybrid' building within that same context. This thesis will mainly describe the first part of the graduation project.

This graduation project is guided by Maurice Harteveld, member of the chair of Urban Design, and Arie Romein, researcher at OTB, as well as by Olindo Case, member of the chair of Building Typology, and Henk Muhl, former member of the chair of Architectural Engineering. The graduation committee is completed with Elise van Dooren on behalf of the Board of Examiners.

I would like to thank them all for their time, assistance, knowledge and support.

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Motivation

Urban debate, research, policy and practice are currently focusing on a few important trends that are closely related to each other: physical structure and environment, social and community issues, economic and financial issues, employment, education and training, spatial and design issues, and urban regeneration (Stouten, 2000). At the moment we are in a time of crisis, limiting the possibilities of urban policy makers and project developers to address these issues and intervene in the built environment. Investments in urban quality are reduced, and many urban development and building projects are on hold or cancelled. The government is more and more depending on private initiatives and the efforts and creativity of people and businesses in order to improve their living conditions and living environment.

But some areas in the Netherlands desperately need clear intervention programs to tackle social, economic and physical problems. The capacities of residents and local entrepreneurs are insufficient to cope with these problems. These areas are in need of a strong urban regeneration program. In the Dutch context, urban regeneration is aiming at solving socio-economic neighbourhood problems, such as segregation, low levels of education, unemployment, low incomes, poor accessibility and poor environmental and living quality, and overall low quality of life (Stouten, 2010).

One of these areas, and also the most problematic, is Rotterdam-Zuid (Stouten, 2010; Team Deetman/Mans, 2011). This part of Rotterdam situated south of the Nieuwe Maas river, is in drastic need of strong and comprehensive interventions solving of the social, economic and physical prob-

lems leading to the regeneration of the area into a lively district with a vital neighbourhood economy. Creating new opportunities – for the personal development of inhabitants and business development of entrepreneurs – is the prime goal. But, as already has been said, the conditions for such projects aiming urban development are harsh.

A clear vision, strategy and strong and comprehensive program are needed to deal with the situation in Rotterdam-Zuid. In 2011 a national program on the development and regeneration of Rotterdam-Zuid was launched, aiming tackling the local social-economic problems, and based on three clear topics: talent development, local economic development and the improvement of housing and the living environment (Team Deetman/Mans).

The aims and means are clear, but the problems are large and numerous, and the means provided are ill-defined, especially when urban planners and designers are to address them, in particular the ones on talent and economy. The program lacks clear spatial-physical interventions, which above all are marking the field of work of urban planners and designers.

The lack of a clear spatial-physical relationship between the problems (aims) and the means of the program forms the lead of this thesis. The author was eager to research the spatial-physical characteristics of the neighbourhood economy. And how can talent development become part of an urban strategy, a development plan or a design?

Linking these two issues to the social cultural, economic and spatial-physical characteristics of Rotterdam-Zuid resulting in an urban plan, that contributes to urban regeneration based upon talent development and a strong local economy is the central theme of this research and design project.

The prime actors within the project are the residents and entrepreneurs of Rotterdam-Zuid, as the success of the development of the area depends on them. They live, work, learn and play in the built environment. The built environment forms the link between them and the renewal program. The built environment accommodates activities that contribute to urban development, the improvement of living conditions, to economic vitality and eventually to successful regeneration. Discovery, development and exploitation of talent, and establishing successful businesses, it all happens within the built environment. So what should this built environment look like in order to create a successful and regenerative neighbourhood? And how does this translate to the case of Rotterdam-Zuid? An could perhaps the local creative industry,

which is characterised by its small scale, its flexibility, and its often people-oriented manner, be of any support in this matter, in particular in discovering, developing and exploiting local talented youth and in preparing them for a better future? These issues are being tackled in this thesis.



Problem field: economy, planning and urban regeneration

INTRODUCTION - CHAPTER 2



Urban renewal in progress (Brandeisfotografie, 2013)

Problem field: creative economies and urban regeneration

In this first chapter the general thematic, societal and scientific context of this thesis and the design project are described. It starts with a general historic development of the urban economy, in order to describe the contemporary economic context urban planners and designing are working with, to give an image of the developments that led to the modern-day situation and to show today's relevance of small-scale economic development. The change from large-scale economic development of the 19th and 20th century, to the smaller scale entrepreneurship that became an important factor in economic development after 1980, has also led to a shift in urban planning in general. This shift from general governmental planning to local urban development planning and local initiatives is described subsequently.

This introduction marks the scope of this thesis: urban economic development on a local scale, the neighbourhood. This thematic approach is made operable in a specific urban area with specific urban problems. Through a specific approach, namely economy-based urban regeneration with a focus on small-scale enterprises in the creative sector (ranging from services to crafts), the author tries to find a way to contribute urban regeneration in Rotterdam-Zuid.

2.1 The urban economy: from small to large to small

In the current debate regional economic planning, the city plays an important role (Van Dijk and Schutjens, 2007). And vice versa, in the current-day practice of urban governance but also in the practice of planners and designers, the urban economy is one of the major themes in urban development and transformation, especially in the regeneration of deprived neighbourhoods (Ouweland and Van Meijeren, 2006a; Ministerie van Economische Zaken, 2010).

The economy of the city – driven by production and consumption of goods and services – and urban life have been drifting apart physically since the Industrial Revolution. Manufacturing and trade were located on the same location until the 19th century, and since then industries, the places of production, have left our cities, and shops, places of consumption, became more and more concentrated in shopping malls and streets, separated from residential neighbourhoods.

During recent years a renewed interest was developed among urban planners, researchers and governments for the legacy of critics like Jane Jacobs, who rejected the 1950s and 60s modern urban planning of functional separation, mono-functional city centres, shopping malls and suburbanisation, and who advocated the liveable, multi-functional and finely grained city.

From local to global: the disappearance of the small-scale economy

Since thousands of years the city is a strong concentration of people, markets, economic initiatives and commerce (Van Dijk and Schutjens, 2009). These concentrations appeared on economically and/or military favourable locations, such as river crossings, safe harbours, close to castles and citadels, and around monasteries and churches. The concentration of people and business in settlements attracted new people looking for a place to live, to work, and to create work. The economic market grew and became more diverse. New services were needed and the organisation of the market and the city became more important.

The economy of the city was shaped by small local businesses and services, of which some were related to the regional farmers. For a long time, cities were dominated by small-scale local economies, which were, or were not, associated in local partnerships such as guilds. During the Middle Ages and early modern period the economy of cities was bound to traditional location factors such as the size and

growth of the market, and good accessibility.

At a certain point in history the economy of cities started to be fed by interregional and international production flows. But during this period of Colonialism (1500s–mid 1900s) the urban economy remained a market of local demand and supply. During this period the growth of cities was based upon their role as a staple market, and sometimes on their position as a political and administrative centre in the ongoing centralisation of the government (Engelsdorp, Gastelaars et al., 2006 in: Boonstra and Roso, 2009a). During the Industrial Revolution (1750–1850) the urban economy started to change. Technologic innovations provided an unlimited scale for the manufacturing industry, which attained a clear position within the city. The city obtained a dual character: traditional, small-scale local businesses on the one hand, and on the other large-scale industries using cheap labour and a wider market. From around 1800 cities experienced rapid growth following the need for labour power as a result of large-scale industrial growth.

For a long time economic activities took place within the boundaries of the city: transport, trade, (industrial) production, etc. But during the 19th century these functions were moved towards the city edges, as the increase of scale and the growth of industrial production increased nuisance and pollution. Around these industrial complexes labour worker housing was constructed, during the 19th and early 20th century these neighbourhoods grew rapidly and were often the stage of poor health and welfare conditions (Ouweland en van Meijeren, 2006).

The development the Garden City concept during the late 1900s was reaction to the growing urban problems of industrialisation, population growth and nuisance. This idea was developed by Ebenezer Howard, he foresaw strict separation of living and working. In the Netherlands increased urban liveability problem resulted in the Housing Law of 1901. After the Second World War, the separation of functions was introduced on a large scale following the ideas of the CIAM (*Congres International des Architectes Modernes*), also in the Netherlands. Living and working were strictly separated, and cities had to be planed precariously according to the Modernist ideas. All services, ranging from local shops and shopping malls to schools and playgrounds, were tuned to the amount of residents a certain neighbourhood unit. Industry, large-scale production and locations for trade were situated outside neighbourhoods, and were no longer part of the neighbourhood economy. During this period Jacobs was one of the first to rejects this strict way of segregated urban planning.

After World War II, during the period of reconstruction, the economy became more and more dominated by large international companies that thrived on technological development increasing the scale and the growth of production, and that was fed by the need for reduction of costs, globalisation and increasing international competition. Economic activities became foot-loose and did not need the city as a place of production any more (Van Dijk and Schutjens, 2007). The rapid growth of cities decreased during the 20th century, first in the United States and later in Europe, as a result the introduction of affordable automobiles and of suburbanisation. This resulted in the segregation in cities; urban policymakers feared the downfall of the city. While wealthy residents and driving economic sectors such as wholesale, transport and industry were leaving the city, cities were left with abandoned factories, and poor people with a social-economic weak position. The growth of business services compensated this loss partially, but in many cases this sector is not anchored in and bound to the city centre and often found its place on the edge of the city (Boonstra and Roso, 2009a).

“It was long thought that capitalism would mean the death of small businesses.” (Kloosterman and Van der Leun, 1999, p.661) The roots of capitalism lies in small business of the pre-industrial cities, but the increase of scale of production during the 19th and 20th century would certainly wipe out smaller economic activities in favour of very large enterprises, something the great scholars of capitalism Karl Marx, Max Weber and Joseph Schumpeter agreed on. From the 1890s onwards the number of small businesses as well as their role in the economy declined (Chandler, 1994). Politicians and social scientists did not feel the need to do anything about this, as they believed that their extinction was imminent.

Re-emergence of the small-scale economy

The small-scale economy regained attention during the early 1980s as a result of the oil crisis and the following economic crisis. Large-scale companies were strongly depended on raw materials and fuel, and on work force. During this period the surprisingly strong competitiveness of small, flexible companies with strong internal networks was discovered. In order to be able to compete on the world-wide market, one discovered that by applying new strategies such as product development and innovation, economic profit could be made. Innovation did not depend on traditional economic location factors such as land prices, market

growth and transport costs; information, knowledge and the transfer of data were eventually seen as the foundation of economic growth. Contact with other companies and organisation and the creation of networks, within as well as outside the economic chain also became important.

During the 1970s the decline of small-scale businesses came to a halt, first in the United States in 1972, and later in other advanced economies (Kloosterman and Van der Leun, 1999). During the 1980s the number of small-scale business even increased, although this change initially went unnoticed in the annual social-economic statistics. During the neo-liberal revolution of the 1980s, small entrepreneurs were eventually able to become a major instigator in the change of economic development in advanced economies. In the Netherland the number of small entrepreneurs (e.g. self-employed entrepreneurs with or without employees) increased from 560,000 (8.9 percent of the total labour force) in 1992, and to 1,077,000 (14.6%) in 2011 (Kloosterman and Van der Leun, 1999; CBS, 2012). Especially the number self-employed entrepreneurs without employees (freelancers or *zzp'ers*) increased during this period; they constitute about 10 percent of the total labour force.

During this period also the policies on urban planning and urban renewal changed rapidly. During the 1960s and 70s the combination of working and living in the neighbourhood was still limited. Environmental policies became stricter and polluting economic activities had to leave the city; vacant locations were often filled in by new housing projects. During the 1980s as a result of the economic crisis, the importance of local economic activity regained interest, and local economic initiatives were developed by residents and local entrepreneurs, despite some small local successes, policies on local economic development that were adopted during the 1980s did not result in viable economic activity in neighbourhoods (Ouweland en Van Meijeren, 2006a). Urban planning policies of the 1990s were mainly aiming at economic development on the urban and regional scale. Urban renewal programs were based merely on physical renewal and on urban dynamics, instead of on local dynamics. During the first century of the new millennium a shift took place in the direction of local economic development strategies as a part of the urban renewal program.

During the 1950s and 60s the economic situation in many urban neighbourhoods started to worsen. In many neighbourhoods, economic activity did not only decline as a result of withdrawal of in-

dustries, but also as a consequence of changing demographics, and technologic, social and economic changes (Ouwehand en Van Meijeren, 2006a). The shrinkage of households caused decline of local consumption, effecting local shop-owners and decreasing economic vitality. Also increased wealth, technologic developments (e.g. fridges and freezers making daily shopping unnecessary), and increased mobility had put pressure on local entrepreneurs.

Not only changes in consumption but also changes in production decreased local economic vitality and local economic support for neighbourhood development. Increase of scale, globalisation and more recently the introduction of online shopping dominate modern economic development. Large chains of stores, centralised shopping malls along highways and on-line stores dissipate small local shop-owners and other local entrepreneurs.

And last but not least, social segregation in cities diminished purchasing power in certain areas. During the 1960s middle and higher income households started to leave post-war neighbourhoods, and deprived neighbourhoods attracted even more disadvantaged residents during this period. Low-income, often immigrant newcomers weakened the economic base of neighbourhoods.

Residents of problem neighbourhoods did not profit from the economic shift and the increase of wealth of the 1980s and 90s, while the better educated and employed did. The change in the development of the economy is based on the structural changes in supply and demand of the last decades (Light and Rosenstein, 1995 in: Kloosterman and Van der Leun, 1999). The introduction of affordable personal computers in the 1980s and 90s enabled small entrepreneurs to benefit from the rapid development of information technology, increasing their position on the supply-side of the economy. While, large businesses struggled with bureaucracy, limiting necessary changes in order to react to rapid market changes or to launch new products and services (i.e. the demand-side of the economy). Markets are changing constantly, are becoming smaller and new and more market segments called niches appear. Large companies started to outsource certain business activities to smaller companies creating new business opportunities for small entrepreneurs, and small entrepreneurs also started to take their own initiatives in creating new niche markets (Sassen, 1991).

The shift in supply and demand benefited small businesses in all layers of the economy, from up-market services and manufacturing, such as media

and *haut-couture*, to downmarket companies such as sweatshops, which co-exists with large textile firms and local ethnic shops (Kloosterman and Van der Leun, 1999). An important sector within the urban economy that often appears in scientific research and urban policies is the 'creative industry', and its citizen equivalent, the 'creative class' (Priemus and Van Kemper, 1999; Florida, 2002; Verschoor *et al.*, 2007). Creative industries can contribute strongly to economic and urban development of cities, as well as neighbourhoods. This thesis will explain this.

During the 1980s the shift in scale and orientation of companies and its success was associated with clusters of companies in so-called economic sectors of growth, resulting in regional economic growth. An example is Silicon Valley in California, where small ICT-related companies were clustered. The success of Silicon Valley is based upon transfer of knowledge and collaboration, combined with large competition keeping entrepreneurs sharp. This resulted in renewal, and growth of productivity and employment. Concentration of business from new, strong economic sectors, became also possible outside the traditional economic centres, resulting, also in the Netherlands, in 'Valleys', 'Clusters' and 'Parcs', with businesses specialised in certain sectors (Van Dijk and Schutjens, 2007).

During recent years, this vision on economic clusters in the Netherlands is questioned, especially in new sectors (De Bruin *et al.*, 2004 in: Van Dijk and Schutjens, 2007). The view on the urban economy is changing: economic growth related to clustering is limited, the place of residence often becomes the place of work and the focus on the creative class is increasing. Governments mainly focussed on business parks, already established firms and high-tech start-ups, but small entrepreneurs were often ignored in this narrow-minded view (Kloosterman and Van der Leun, 1999). Although proximity is an important location factor, communication between businesses increasingly takes place via internet, especially among established businesses. Moreover, new economic growth sectors as ICT and commercial services, rely more and more on the internet (Van Dijk and Schutjens, 2009). Economic growth as a result of clustering is often limited or even absent. Only in a few specific cases, unique local characteristics such business districts, financial centres and clusters combining knowledge institutions and related businesses, appear to be successful, but these clusters can't be copied easy as they acquire specific location factors.

According to recent studies, factors in urban eco-

economic growth are on the one hand traditional location factors: accessibility, land and property values, the proximity of a large local market, specialised services and knowledge; and on the other hand: the proximity of other companies within and outside the chain resulting in transfer of knowledge, social-economic urban diversity which is a matrix for new plans, products and processes, and strong competition among entrepreneurs resulting in innovation (Van Dijk and Schutjens, 2007).

The factor 'diversity' is closely related to another important aspect in the competitiveness and vitality of neighbourhoods in urban economies, namely quality of life. The importance of the neighbourhood economy in their development regained interest quickly during the 2000s. The improvement of local social-economic conditions based on investments and initiatives within the neighbourhood economy does not only solve local problems. It is a combined effort. The improvement of local conditions, also influence the quality of life in the city as a whole, and a high quality urban environment is an important location factor for entrepreneurs and investors (Ouwehand en Van Meijeren, 2006a).

2.2 The creative city

The shift in the economy from large scale to smaller scale production that started in the 1970s, has had a great influence on the way we currently look at our cities. These days, each and every person, as well as many cities, is engaged in creativity. During the 1980s, as a result of this shift the concept of the creative city appeared. Today "the creative city has become a popular concept among urban policy-makers worldwide" (Romein and Trip, 2009, p.1). The popularity of this concept can be explained by the structural technological, economic, geopolitical and societal changes of the last couple of centuries.

The idea of the creative city is based on the conception that all people can bring forward exceptional things if they are given the chance to exploit their creative talent (Landry, 2005). A creative city is not only made by artists and people working in the creative industry; creativity can evolve out of anything and anybody.

According to Landry (2000) a creative city is not only based on hardware such as buildings and roads, but also on software or soft infrastructures: high educated and flexible labour force; dynamic thinkers, creators and executors as creativity is not only about ideas; a large formal and informal intellectual infrastructure; the possibility for outsiders

to develop themselves; strong internal and external channels of communication; and an overall climate of social and economic entrepreneurship. Being creative as an individual, organisation or company is fairly easy, but being creative as a city is very complex task and asks for new ways of dealing with the built environment and the creation of a creative environment.

During the 1970s and 1980s the emphasis was more a more laid on thinking power instead on physical power. Added value was created by ideas that were transformed into innovation, invention and copyrights (Landry, 2005). The economy changed from an industrial production economy into a creative production and service economy. As a consequence the educational system was changed, focussing more on learning how to learn, create, discover, innovate, solve problems and (self-)evaluate. Also organisation and management structures changed, creating more room for flexibility and creativity.

Although creativity is currently understood as a fairly wide conception, creativity and the idea of the creative city originated from the 1980s American discovery that the economic value of art had been underestimated. During the 1980s and 90s culture appeared as one of the means of the success of cities, and its success was executed in the physical form (urban design, architecture, parks, natural environment) but also in the form of amusement and artistic activities and production. This was not the only impetus to this shift, but also by the paradigmatic change from the industrial era to a new era in which western economies are changing fundamentally. Both offer – new technologies such as ICT and biotechnology, and new products and highly productive production processes – and demand have changed during the last decades. The geopolitical and economic shift created competitors for the western production markets and trade between countries liberalised. And increased wealth, independence and individualisation led to an increase of consumption and number of lifestyles, and to a diverse and volatile demand for goods and services (Romein and Trip, 2009). This also includes the consumption of 'services' such as symbolic values and experiences, and 'goods' as urban atmospheres and spaces.

The competitive power of modern urban economies depends no longer on mass production, but on symbolic values, which are created through creative design activities and rapid innovation.

Following the ideas of Charles Landry, the concept

of cultural industry changed into the concepts of creative industry and creative economy in the late 1990s. A few years later Richard Florida (2002) published his first book on the creative class and shortly after cities quickly started to stimulate policies on creative city development and the attraction of creative industries. This led to a focal shift from the improvement of the business climate, into the improvement of the living climate, and quality of life.

These economic and societal changes, increased competition, market fragmentation and trend changes, and the need for quality and uniqueness led to an unprecedented need for technologic and conceptual innovation and flexible production (Kloosterman, 2005).

During the 1980s one thought that flexible production could only be achieved through local networks of small companies located in clusters (e.g. valleys, clusters, parcs), but thanks to ICT revolutions larger companies were able to cope with these changes very well. Nevertheless we can see that locations have specialised in certain forms of innovative production, and the shift in offer and demand eventually resulted in economic development on a local scale. According to Kloosterman these innovations are a result of specific creative environments in which social, cultural, political-institutional and spatial conditions form a unique combination, making them and their innovation difficult to copy, and so creating a strong and sustainable competitive position. These clusters contribute to wealth and employment in a region that extends beyond the cluster itself. Within these clusters the people that contribute directly to innovation are of strategic, fundamental importance; they are the creative class (Florida, 2002; Kloosterman, 2005; Romein and Trip, 2009).

2.3 Changing perspectives in urban planning

The shift in the economic system that has taken place since the 1970s, is followed by a shift in urban development from the large scale of governmental 'normative' planning to urban planning based on local initiatives and dynamics, and that is aimed on specific local contributions.

Contemporary urban planning originates from the beginning of the 20th century. The first important law on urban planning was installed in 1901, the Housing Law. Based on this law all new urban developments in the Netherlands had to meet general, standards concerning the quality of housing and city layout. This strong governmental approach on

planning evolved during the subsequent decades to the National Law on Spatial Planning of 1965. The planning approach of the Dutch government was based on the idea of the planned society and on the 'normalisation of space'.

Currently governmental initiatives are withdrawing and private and civic arrangements are increasing (Boonstra, 2008). This change in urban planning – 'who takes the initiative?' – is caused by the already described major societal shifts of the last decades. The field of action of planners, society, changes into a complex, multi-layered and rapidly ever-changing arena (Castells, 1996 and Sassen, 1991 in: Boonstra, 2008). New players in this arena are residents, entrepreneurs, private companies and civic organisations. Their involvement in spatial development processes has increased as a result of improved accessibility of information, possibilities for participation, legal procedures, empowerment, and weakened position of government in land and real estate politics and decreased financial means of public parties. In this perspective a new approach on urban planning has raised based on urban development. Important aspects of this approach are local characteristics, temporary cooperation of actors, civic coalitions and spatial investments. The new Law on Spatial Planning, which was installed in 2008, creates a new framework in which other parties than the government, so public, private or civic parties, can operate in the urban planning process, answering to the growing social complexity.

As a result of the growing complexity and fragmentation of society, contemporary society has become "more elusive and individual" (Koffijberg & Renooy, 2008 in: Boonstra, 2008). While previously static communities and strong civic organisation were major interest groups for urban planning, nowadays the individual resident and the small-scale entrepreneur have entered the arena of urban planning. During the last decade a new form of participation appeared: the 'citizen initiative', in which citizens (residents or entrepreneurs) take their own responsibility to address their own issues, while the government only facilitates the initiatives they take. Most probably a change in planning towards increased involvement of local actors, also changes the perspective of urban development, aiming to improve the conditions of local residents and entrepreneurs instead of aiming at a more broadened and generalised way of urban planning.

In modern Dutch urban planning there are four fields in which participation is practiced: new city

layouts, large strategic projects, regional landscape development plans and urban regeneration; the latter one being relevant in case of this thesis. Urban regeneration depends increasingly on the involvement individual actors, as well as public and private parties. But often citizen initiatives are restricted by governmental frameworks; while civic parties currently are already more involved in urban development processes and have more freedom. But individual residents and small-scale entrepreneurs can also play a role in urban development processes outside planning procedures (Boonstra, 2008).

An example of the impact of individual initiatives on urban development is the emergence of small-scale neighbourhood economy. Research by Boonstra and Roso (2009a) has shown that economic growth seems to concentrate within specific neighbourhoods: mixed neighbourhoods with small-scale entrepreneurship. These areas have on average the fastest growing economy (measured in jobs) within urbanised areas. This highlights the importance of the local economy in the development of urban area; aside from the urban, regional and international economy. In order to achieve a well-functioning local economy, public investments and involvement only is not enough, local actors play a major role in the development of the neighbourhood economy.

“Local economy is often mentioned as an instrument for urban regeneration of deprived neighbourhoods.” (Boonstra, 2008) Jane Jacobs was one of the first to describe, in her book ‘The Death and Life of Great American Cities’ (1961), the individual intentions and actions of residents and entrepreneurs in this process, a process she called ‘unslumming slums’. The local economy has the potential to increase the quality and liveliness of urban neighbourhoods. By self-organisation, planning processes can be connected to existing processes and urban dynamics in a more effective way, as planning is aimed at the local instead of at the ‘normal’. This illustrates the importance of the individual actions of residents and entrepreneurs in urban development processes, also from an economic point of view. In addition, local initiatives do not only improve the direct living environment, but benefit the larger scale as well.

The new way of urban planning should be a project-based practice, where “in each area, in each case, issues are addressed specific for that particular case, and regimes between public and private parties are arranged around those cases”. (Boonstra, 2008). Local urban dynamics should be connected

with each other and with other scale-levels, using local characteristics, individual intentions, present social interaction and networks, the latter being based on proximity touching on the relevance of locally-aimed planning measures (Kloosterman and Van der Leun, 1999).

This thesis focuses on following local dynamics of Rotterdam-Zuid. Connections that are made are between disadvantaged residents (especially the unemployed, the immigrant, the youth without future perspectives, but with potential talent), and with local entrepreneurs in the creative sector and commercial services sector, and larger actors such as schools and large-scale companies. But a strategy on urban regeneration of disadvantaged neighbourhoods should not focus on ‘citizen initiative’ only, but should focus on the wider involvement of civic and private actors and make use of their specific characteristics, intentions and networks.

2.4 Changing perspectives in urban regeneration

Both the local economy and the ‘citizen initiative’ play a crucial role in urban regeneration, as will be clarified in this thesis. But before the effects of the local economy on urban regeneration and the role of local actors such as residents and small-scale entrepreneurs are studied and explained, an introduction will be given on urban regeneration. Urban regeneration is often used synonymous with urban renewal. But one could also make a distinction between the two terms.

Urban regeneration can be defined as the process that leads to the improvement of social, physical and economic conditions in deprived urban areas. These deprived urban areas appeared during the 1960s, when industrial production by manpower was rapidly replaced by machinery, and factories started to move out of urban areas, as they were in need of space and better infrastructure. As a result urban employment decreased. At the same time, there was the tendency of selective out-migration of middle-class and higher-income households from urban neighbourhoods to attractive suburbs and growth centres around the large cities, while low-income households remained. At the same time, the low housing prices and low rents in these former (industrial) working-class neighbourhoods attracted more disadvantaged residents as well as immigrants, which were attracted during the 1960s as guest workers in low-paid sectors of the economy. The poor perspectives of these often low-educated people, lead to a rapid increase of unemployment in these neighbourhoods resulting

in quick deterioration of living conditions and a swell of social-economic problems. part from unemployment and low education levels, these problems are: poor living conditions (housing), social insecurity, crime, vandalism, social tensions and limited participation. As a result, during the 1970s and 80s extensive urban regeneration plans were made for disadvantaged neighbourhoods.

Urban renewal is often associated with the first post-war policies on the improvement of the urban built environment, directly after the Second World War and during the urban renewal period of the 1980s (Platform 31, 2013b).

Directly after World War II, the policy on urban renewal was focussed on cleanup, removal of slums and reconstruction, especially in and around city centres where old residential and functionally mixed neighbourhoods were demolished and often replaced by economic programs such as large office buildings, modern shopping boulevards, new major traffic arteries and parking garages in order to develop inner cities into economic centres. To meet the rapidly growing demand of housing, new modernist neighbourhoods were built around cities, initially to meet the demand for new housing, primarily for families that wanted to leave the overcrowded pre-war neighbourhoods. Later many of these neighbourhoods shared the same faith as the old pre-war neighbourhoods, as was described earlier.

During the 1970s and 80s plans were made for the renewal of pre-war neighbourhoods. The policy of this period was characterised by 'bouwen-voor-de-buurt', or building for the neighbourhood. Small scale, housing and a limited disturbance of the existing social and urban structure were prioritised, not were economic functions and urban reconstructions improving accessibility. Renovation and new housing development was based on the existing built (physical) and social structures, improving living conditions, but keeping housing in these neighbourhoods affordable.

At the end of the 1980s and early 1990s critique on the urban renewal policy increased. *Bouwen-voor-de-buurt* was only focussed on creating and improving housing for the lowest incomes, social climbers were forced to leave their neighbourhood, in search of a living environment and housing that met their increased demands. The poor physical conditions in neighbourhoods were often solved by the policy, but the social-economic problems *achter de voordeur* (behind the front door) were not being solved (e.g. such as unemployment, school

absenteeism, criminality and social tensions). In the 1980s a new policy based on local policy and social-economic measures was introduced. This policy was transformed into 'social renewal' in the 1990s, aiming at improving the level of education to boost employment, strengthening social cohesion and counteracting degradation and pollution of the living environment, by involving local residents.

In 1994 a policy on renewal in major Dutch cities was introduced, besides the existing policy, called 'Grotestedenbeleid'. This policy was based on three pillars of urban development and renewal, namely physical, social and economic, and aimed at reducing unemployment, and at improving the economic competitiveness of cities. Long-term visions and strategies on urban renewal were made based on strong integration of the three pillars, creating a basis for dialogue between actors involved (Duyvendak, 2001 in: Platform 31, 2013b). Now, not only the municipal government and residents were committed in this process, but also housing corporations, welfare organisations and entrepreneurs.

An advantage of the tree-pillar approach was the possibility of creating an integral approach to urban development, and problems could be pointed out clearly, resulting in localised efforts and synergy between initiatives. Negative aspects of this integral approach, is that when one problem or pillar is dominant, the overall synergy between the pillars is lost problems cannot be solved. Another problem is formed by the economic pillar, as this pillar has no clear problem owner, unlike the social and physical pillar (i.e. municipality, corporation and welfare institutions), consequently weakening an integral approach (Ouweland en Van Meijeren, 2006a).

A positive result of the new approach was the change in the organisation of policy and planning, improving partnerships between different governmental services and other actors. Large financial input was generated such as subsidies, but the budget was not freely usable hampering the coherence between the pillars.

During the 1990s the idea appeared that through the creation of a vital urban economy, social-economic decline could be prevented. A policy adopted in 1996 had to enhance the 'vitality' of cities by the creation of a stronger economic base, resulting in more employment and less social exclusions (Priemus and Van Kempen, 1999). To achieve this accommodation for businesses, public spaces, accessibility, residential quality and quality of life

had to be improved and art and culture should be stimulated. But, one of the problems in achieving economic vital cities is the lack of human capital and highly educated residents in cities as Rotterdam (Priemus and Van Kempen, 1999; Van Winden *et al.*, 2007).

With the New Urban Renewal Policy Document of 1997, the urban renewal policy shifted towards neighbourhood approach or '*wijkaanpak*', including reshaping inner cities, former industrial sites and harbour areas and post-war neighbourhoods. In case of the latter, urban impoverishment and social-spatial segregation were being counteracted by demolition of cheap, undesired multi-family housing and construction of housing for middle and high income residents. This in order to attract new groups of residents to deprived neighbourhoods creating neighbourhoods with residents of mixed social-economic backgrounds (Priemus, 1997 in: Platform 31, 2013b). At that time, policymakers and social scientists assumed that differentiation would strengthen the social structure and social cohesion in neighbourhoods, reducing the lack of personal opportunities and segregation. Middle and high class newcomers in the neighbourhood would also function as role models for the underprivileged and weak groups in society. The effects of this type of 'social engineering' are limited and were consequently heavily criticised (Platform 31, 2013b).

Neighbourhood effects are limited, especially in the Netherlands (Platform 31, 2013c). Many different researchers, domestic and foreign, conclude that, enforced mixing of different social groups (e.g. income and ethnicity) does not solve problems such as unemployment, low levels of education and social cohesion (o.a. Hall, 1997; Parkinson, 1998; Musterd *et al.*, 1999; Van Kempen & Priemus, 1999; Kleinhans *et al.*, 2000; Ostendorf *et al.*, 2001; Crump, 2002; Skifter-Andersen, 2002; Van Beckhoven & Van Kempen, 2002 all in: Platform 31, 2013c).

The social position of people is mainly determined by personal characteristics. "*Mensen hebben geen achterstand door de wijk, maar wonen er omdat ze al een achterstand hebben.*" (Van Staal, 2003 in: Platform 31, 2013c). Serious social arrears are not formed by the neighbourhood; people live in certain, deprived neighbourhoods because they already have social problems. Restructuring can reduce the concentration of poverty and other social-economic problems in neighbourhoods, making them more 'average', but does not help individuals with employment and education. The

arrival of newcomers does not create new social networks; LAT-relations (living apart together) appear between the fortunate and the unfortunate. Physical proximity does not necessarily lead to social proximity (Platform 31, 2013c). It could even have negative consequences on the short-term as social networks crumble as some of the original residents are forced to leave and an increased mix of (conflicting) cultures and life styles leads to social tensions.

It is stated that the mentioned restructuring of neighbourhoods is deployed as a mean to strengthen the market position of neighbourhoods and their housing stock. Changes in housing of deprived neighbourhoods, does also have positive effects, when the housing stock is made suitable to retain certain groups in the neighbourhood such as seniors and social climbers. This way, social networks are maintained.

A new policy on housing introduced in 2000 focussed on the preceding issue. That year, a new document on housing policy was released called '*Mensen wensen wonen. Wonen in de 21e eeuw*'. Key notes in this new policy are quality and free choice, so aiming not only on attracting new residents but also on retaining social climbers in the neighbourhood. Differentiation in the housing supply and living environments should make local housing careers possible and keeping social networks intact. The policy was not directly focussed on top-down social-economic regeneration, but on natural renewal by maintaining the neighbourhood dynamics and stimulating local development.

In order to solve urban social-economic problems (e.g. crime, social tensions, and unemployment) should be solved through the social-economic infrastructure of the city, not through physical measures only. Physical measures (in the housing supply) in neighbourhoods should only be taken in case of technical or convenience problems of dwellings, or in case of a weakened market position or vacancy (Platform 31, 2013c).

During the first decade of the 21st century different national policies on urban renewal of problem neighbourhoods were introduced. The 'Fifth National Document on Spatial Planning' of 2001, shifted in focus from spatial planning policies to a policy based on dynamics and natural development. Exemplary is the change from strict governmental guide lines on retail, to a less strict policy based on market changes and dynamics (Ouwehand en Van Meijeren, 2006a).

In 2002 the action programme '56-wijkenaanpak' was initiated, giving priority to 56 problem

neighbourhoods in large and medium-size Dutch cities, aiming at local (neighbourhood) development by working on social problems in close coalitions between local governments and local actors such as corporations, market parties and residents. This policy also focussed on the importance of the neighbourhood economy in urban renewal (Ouwehand and Van Meijeren, 2006b).

In 2006 a project based on this principle was started: 'Nieuwe coalities voor de wijk' (i.e. New coalitions for the neighbourhood). Thirteen neighbourhoods with severe social-economic problems were appointed, where local coalitions were formed to deal with specific local problems. The first project was 'Pact op Zuid' in Rotterdam.

That same year the report 'Stad en stijging' was issued that concluded, which physical investments alone were not sufficient enough to deal with social cohesion and liveability in problem neighbourhoods (Platform 31, 2013b). Urban renewal should in the first place focus on social mobility (*sociale stijging*) and the economic position of the individual (Ouwehand en Van Meijeren, 2006a). The social and physical pillars were dropped, and urban renewal was focussed on new ways to social mobility: living, learning, employment and leisure (such as sports and culture). In 2007 the latest policy on urban renewal was introduced, based on this report namely '40-wijkenbeleid', a integral renewal policy aimed at social mobility in forty priority neighbourhoods through the creation of new opportunities and a pleasant living environment. In 2011 the focus in the urban renewal program shifted more towards an increased responsibility of residents and local actors in order to draw strength and inspiration from the residents themselves. This thesis will describe, review and deploy the policies and strategies that have been developed since 2006.

2.5 The relevance of the neighbourhood economy

The contemporary policy on urban renewal does not only focus on social and physical renewal; strengthening the economy is also part of the policy (Ouwehand and Van Meijeren, 2006b).

Based on the conclusions of the previous paragraphs, the policy on urban renewal should focus in local dynamics and characteristics, 'citizen initiative' and the involvement of local actors such as entrepreneurs and housing corporations, retaining social networks and social mobility. Acute problems that need to be solved are crime, social tensions, and unemployment. These problems often

related to the lack education and training and the lack of perspective on employment and chances for personal development. These problems are often among formed the youth in deprived neighbourhoods (Ouwehand and Van Meijeren, 2006b).

The neighbourhood economy can play an important role in the regeneration of deprived neighbourhoods. The report of Ouwehand and Van Meijeren (2006b) poses the following questions in relation to the neighbourhood economy. Which chances are there for neighbourhoods and their residents? So, by means of urban regeneration through economic development. Which concrete projects can stimulate the neighbourhood economy? Moreover, does the neighbourhood economy exist?

The economic power of the city

Cities provide specific benefits for business, that consequently stimulate economic growth (Van Dijk and Schutjens, 2007). Besides traditional location factors such as labour force, accessibility, land and real estate prices, proximity of a local market, specialised services and a knowledge-intensive atmosphere, three additional advantages of cities are mentioned by Van Dijk and Schutjens. Entrepreneurs profit from the proximity of other businesses (internal and external to their own economic sector), facilitating and stimulating exchange of knowledge. A second benefit is the social-economic differentiation of urban environments, also mentioned by Jane Jacobs in her book 'The economy of cities' (1969). According to Jacobs, as entrepreneurs get into contact with other social groups with different life styles, with other kinds of businesses and with other cultures, a breeding ground for new plans, processes, products and services is generated, stimulating innovation. A third benefit is the strong competition that occurs in urban environment, caused by proximity of competitors, which also stimulates innovation. The strength of economic growth is, besides by the factors mentioned before, also influenced by attractiveness of the urban environment and quality of life (Begg, 1999; Rogerson 1999; Van Dijk and Schutjes, 2007; Van Winden *et al.*, 2007). Van Winden states that urban problems, such as high concentration of low educated residents in deprived neighbourhoods, crime and safety issues, and congestion – which are often also characteristics of urban environments – have a negative influence on the development of the urban economy. The question is, how does the development of the neighbourhood economy relate to the benefits and disadvantages of urban concentration? And do social-economic problems and a low quality of

life hamper local economic development? Moreover, how can the neighbourhood economy profit from the benefits of urban concentration and the development of the urban economy? These questions raise assumptions: (1) that local economic development is also related to the larger urban and economic context and (2) that physical living environment, social-economic situation and overall quality of life in neighbourhoods influence the neighbourhood economy. These assumptions are researched later on in this thesis.

Input from the neighbourhood economy

The development of the local economy of problem neighbourhoods lags behind the development of the urban economy (Ministerie van Economische Zaken, 2010; Planbureau voor de Leefomgeving, 2010). As has been explained, the link between the city and the economy has been changing for centuries. The ancient, medieval and pre-industrial cities were characterised by strong function urban mixing and small-scale businesses specialised in certain crafts. The 20th century city was formed by a strict separation of functions (from the earliest garden cities to the modernist housing districts of the 60s and 70s), and by policies aiming mainly on improving housing conditions. But during the turn of the century policy makers, planners and social scientist became aware of the importance of economic revitalisation of neighbourhoods – in combination with social and physical renewal – when addressing the regeneration of problem neighbourhoods (Ouwehand en Van Meijeren, 2006a; Van Dijk and Schutjens, 2007).

Although Ouwehand en Van Meijeren present a wide array of local economic initiatives in their research ‘Economische initiatieven in stadswijken’, clear policies on economic initiatives in neighbourhoods are lacking.

Ouwehand en Van Meijeren make a distinction between initiatives oriented towards individuals (*persoonsgericht*) and initiatives oriented towards certain areas (*gebiedgericht*); there are also projects orienting towards both. Initiatives orienting towards the individual should help people (residents and entrepreneurs) getting by and getting on, while initiatives orienting towards neighbourhoods as an entity stimulate the development of business space, employment and a good business climate. Although these projects are inspiring and provocative, and are being copied in other areas, a clear scope is missing (Ouwehand and Van Meijeren, 2006a). Clear analyses of the situation are missing, the type of project and the project aim are not well defined, neither are the precondi-

tions, the intentional process and planning are not described, and clear cost-benefit analysis are not made. This is primarily caused by the absence of a clear and self-conscious problem owner, a role that can – and according to the authors of ‘*Economische initiatieven in stadswijken*’ – should be taken up by the local government.

More about this subject, the neighbourhood economy, and about the relevance of the neighbourhood economy in urban regeneration will follow in subsequent chapters.

2.6 Rotterdam-Zuid

The results from this research will be operated in a specific urban problem area, namely Rotterdam-Zuid, in the attempt to answer the following question. How can local economic development play a role in successful urban regeneration in Rotterdam-Zuid?

Rotterdam-Zuid is dealing with a complex combination of urban problems. The problematics this part of the city is dealing with are not unique but also happen in neighbourhoods of other medium-sized and large cities in the Netherlands. But the scale and severity the problems in Rotterdam-Zuid are beyond any other. The number of inhabitants living in Rotterdam-Zuid, that currently lies around 200 thousand, is equivalent to that of cities as Eindhoven and Groningen. The diversity between the neighbourhoods of Zuid is large, which makes it impossible to come up with one general solution, and there are numerous coherent problems creating a complex context. Zuid is often regarded as a problem area, while ignoring the potentials, ambitions and chances of the (relatively young) population. “Zuid is dealing with an extensive accumulation of social-economic problems in the weakest part of the housing market in the Netherlands. This pill-up of problems is unprecedented in its size and intensity on the Dutch scale.” (Team Deetman/Mans, 2011, p.7)

During the last seven years, two major projects have been started to strengthen the position of Rotterdam-Zuid. In 2006 the program ‘Pact op Zuid’ was initiated by a coalition formed by the municipality of Rotterdam, the borough councils of Charlois, Feijenoord and IJsselmonde and four housing corporations: Havensteder, Vestia, Woonbron and Woonstad Rotterdam. They created a ten-year program aiming at urban regeneration based on themes as employment and economy, youth and housing. The program was initially oriented at quantity, but in 2009 a shift took place in the direction of quality. In 2011 a national pro-

gram was launched aiming at large-scale renewal, instead of a small-scale project-oriented approach. This program is called ‘Zuid Werkt! Nationaal programma Kwaliteitsprong Zuid’. Similar to *Pact op Zuid* this program is based on the themes of talent development, economy and physical quality improvement (Platform 31, 2013a).

The problems Rotterdam-Zuid is dealing with are: a one-sided housing stock, deterioration of housing and public space, dodgy landlords, the exodus of the middle-class, youth problems, low incomes, the unemployment rate, the number of claimants, safety problems, learning and educational arrears and a low quality of amenities. Yet, the borough has also much potential: there is space and greenery, good accessibility and a young and dynamic population (Platform 31, 2013a). The problems and potentials of Rotterdam-Zuid are described more specifically in a later on in this thesis. Also *Pact op Zuid* and *Zuid Werkt!* will be discussed further.

2.7 Scope of the design project

The scope of this thesis and the urban research and design project is the result of three things. First, this graduation project is part of a larger research project focussing on the renewal of urban renewal and the search for a way of natural renewal. As described earlier, cities and neighbourhoods are in need of a form of urban regeneration, based on local dynamics and aimed at local problems. This way, the theme of urban regeneration was introduced.

Secondly, urban regeneration is a very complex process, involving many actors and many local spatial and social-economic variables. In order to narrow down the scope of this thesis, a certain thematic approach is connected to urban regeneration. This theme is the neighbourhood economy. The theme of neighbourhood economy was introduced in an early stage of this graduation project. During the first weeks of the project the author researched the concept of ‘stepping stones’ in cities. These stepping stones, were defined as places where people with a disadvantaged social-economic background have the opportunity to develop themselves in order to escape their underprivileged situation, offering orientation, education, training, employment opportunities, to develop talent, new perspectives and chances. Examples of stepping stones are schools and other institutions, offering education and training. But often future perspectives (on employment and careers) are limited, as

these stepping stones often do not offer a direct stepping stone to the labour market.

At this point the third element towards defining the scope can be introduced. During the first phase of this graduation project, the relevance of employment and (local) economic development in urban regeneration appeared. On this topic the author wrote a literature review paper named ‘Economy-based urban regeneration’ (Caspers, 2012). This review paper describes both the development of the urban and local economy in relation to urban regeneration in the city as a whole, and in neighbourhoods, based on themes as quality of life, knowledge economy, creative industry and local entrepreneurship.

But during later research, so after writing this paper, the importance of addressing the local conditions in order to improve local conditions appeared to be substantial. Therefore, this thesis focuses primarily on the neighbourhood economy, of course in relation to the urban economy.

So far, the scope has been narrowed down to urban regeneration of neighbourhoods dealing with social-economic problems, based upon local dynamics, especially the development of a vital neighbourhood economy. The scope, of this thesis, or rather of the urban research and design project, is narrowed down further as it is placed in a specific urban context: Rotterdam-Zuid, with a clear focus on the neighbourhoods of Feijenoord, Afrikaanderwijk, Hillesluis and Bloemhof.

These neighbourhoods are already the stage of small-scale dynamics and activities. There are a few major local shopping areas with retail, consumer and commercial services, and in the surrounding area business districts with a clear economic profile are located. The economic profile of the neighbourhoods itself, on the other hand is unclear and weak (Boonstra and Roso, 2009b; Deelgemeente Feijenoord Rotterdam, 2010a; Deelgemeente Feijenoord Rotterdam, 2010b; Team Deetman/Mans, 2011). This project aims at social-economic regeneration, meaning the reintegration of residents, mainly youth, in society by education, employment and overall participation. Based on entrepreneurship only (for examples by business start-ups), this goal will never be achieved, as the market would become saturated completely. Neighbourhood economy-focussed regeneration would perhaps imply this. So, the focus should also lie on not self-employed work. The local economy can in this case form a stepping stone for orientation, education, training, talent development and future employment. But the current economic base

of these neighbourhoods would probably be insufficient, offering limited slots for entrepreneurship, as for education and training. In addition, the perspective on social mobility entrepreneurs and employees have within the retail sector and consumer services (catering-industry, hospitality, hairdressers, etc.) is often very limited (Kloosterman and Van der Leun, 1999). The sectors industry and commercial services offer a wider perspective on social mobility, as well as the cultural sector (creative industries). Commercial services are widely represented in the area, and services range from low-profile such as telephone offices (*belhuizen*) and money transfer offices, to employment agencies, travel agencies and small consultancies and accountancies, to high-end law firms.

At the moment, the presence of creative businesses in Rotterdam-Zuid is limited, and creative enterprises are mostly invisible in the problem neighbourhoods, both visually as mentally. Therefore this thesis focuses especially on the creative sector.

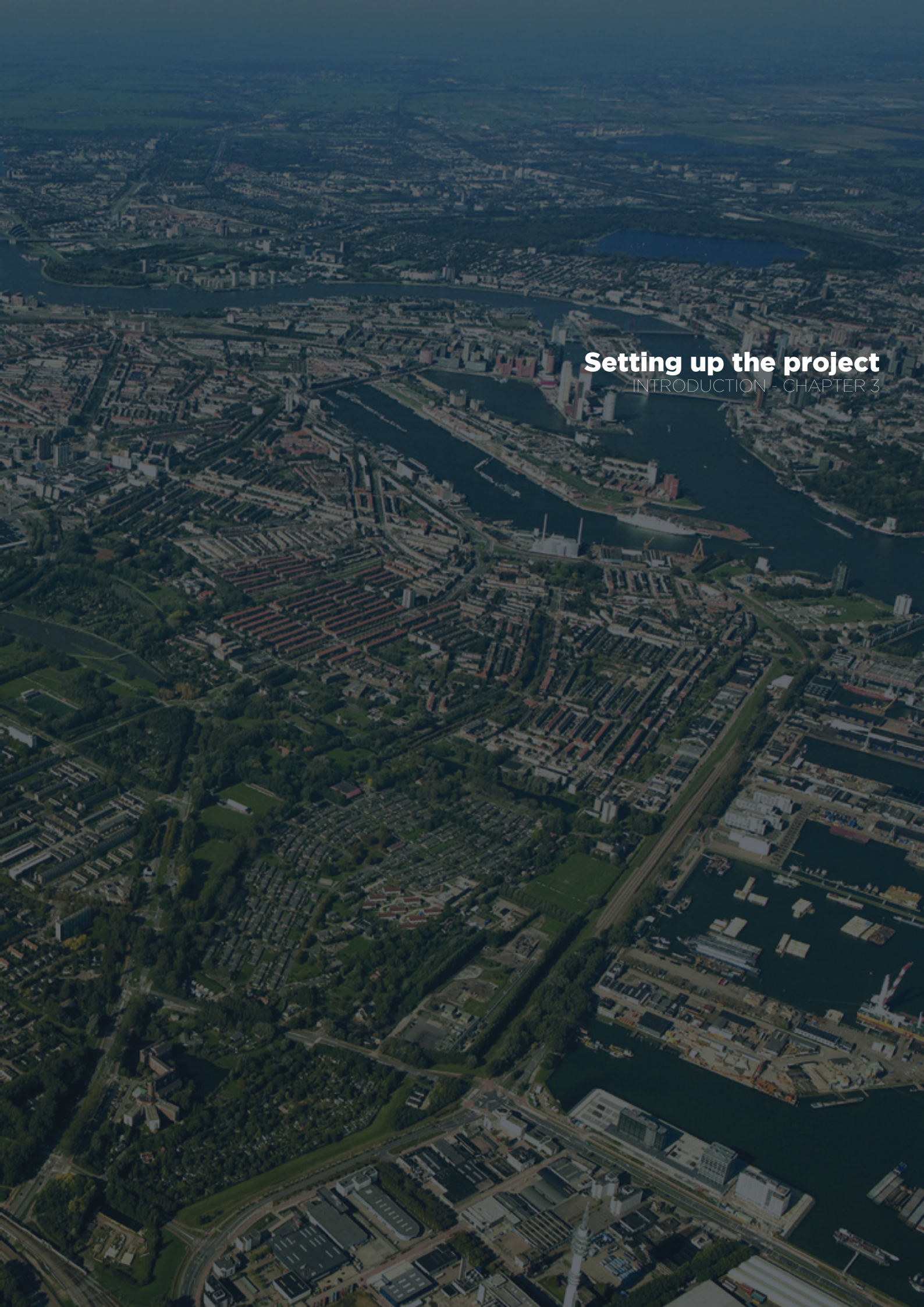
2.8 Problem statement

The observations and assumptions made in previous paragraphs lead to the following problem statement. Rotterdam-Zuid is in desperate need of an urban regeneration program that tackles the social-economic problems. Local dynamics and characteristics are a crucial aspect in the renewal strategy that is developed for the area. Based on contemporary researches and policies on urban renewal, the strategy should incorporate the neighbourhood economy and local initiatives of residents and entrepreneurs. Special attention will be given to creative entrepreneurs.

The main question that will be answered in this thesis is: how can local creative entrepreneurship contribute to the social-economic regeneration of Rotterdam-Zuid? The most important question related to the design project is: where in Rotterdam-Zuid can we give physical shape to this contribution, in form of spatial planning and design? But before these questions can be answered, we first have to question whether creative industries and other small-scale economic activity in general, can contribute to social-economic regeneration.

In order to come to the right strategy the local context should be analysed and mapped. What are the social-economic problems in Rotterdam-Zuid, and what are the social-economic dynamics in the area? How is the local economy in Rotterdam-Zuid shaped? What is the spatial-physical urban structure of the area? How is Rotterdam-Zuid imbedded in the city?

Other important secondary questions are the following. The first question that needs a proper answer is: how can the local economy, especially the creative industry, contribute to urban regeneration in general? And what urban planning and design criteria contribute to local creative economic development? Also the link with urban dynamics, the urban economy and nearby clusters of economic activity is important. How do the strategy and the project relate to the city as a whole, regarding the urban economy? What do social and urban scientists say about this, and what are the links within this framework between Rotterdam-Zuid and the city? And finally, what are the potentials of the development of creative businesses in Rotterdam-Zuid; does the city have a certain policy on creative industry, are there relevant examples and how can this sector contribute to urban regeneration in Rotterdam-Zuid? In this thesis the author tries to find an answer to these questions, leaning towards a development strategy for Rotterdam-Zuid, and to an plan and design for a specific location within the area.



Setting up the project

INTRODUCTION - CHAPTER 3



Rotterdam-Zuid (Team Deetman/Mans, 2011)

Setting up the project

In this chapter the aim, approach and relevance of this graduation project are explained. In the first paragraph the prime aim of this project – social-economic regeneration in Rotterdam-Zuid – will be explained by setting clear goals and the trajectory that should lead towards the improvement of the social-economic situation of residents of the neighbourhoods Feijenoord, Afrikaanderwijk, Hillesluis and Bloemhof. The second paragraph will place the research questions mentioned in the project statement in a certain order, and link them to a specific methodology helping in answering these questions. How is information obtained on the specific topics and project sites? How is this information linked to the problem statement and the aim of the project? And finally, how do the conclusions from this research lead towards a strategy and urban design for the area?

This chapter will be concluded with a short review of the societal and scientific relevance of this project.

3.1 Project aim: social-economic regeneration

The overall goal of this graduation project is to define which strategy and design, can contribute to the social-economic regeneration of Rotterdam-Zuid. The aim of this strategy, social-economic regeneration, is specifically projected on:

- » good orientation on education and work;
- » excellent education and training possibilities;
- » talent development;
- » better and relevant employment opportunities;
- » better local business opportunities;
- » overall improved future perspectives;
- » overall participation.

The strategy is especially aimed at disadvantaged youth and on local entrepreneurs. The first thing to provide is a view on a bright future for the youth, and other residents, living, working and enterprising in Rotterdam-Zuid.

Better orientation of education and work is assumed to be very important, as well as excellent education, training and development programmes. The local entrepreneurs, especially the ones in the creative sector, are mobilised to help disadvantaged residents to orientate on their future and to develop their talents. This is done in order to create improved employment opportunities, within and outside the neighbourhood, and to create overall perspective and participation. The desired effect of the combination of these efforts is more commonly called social-economic integration.

The project also aim on wider effects such as the creation of new entrepreneurship opportunities in the neighbourhood, for instance in the creative sector. Another desired effect is social mobility of residents in Rotterdam-Zuid, and the improvement of social-economic standards (i.e. education, work, wealth, health, living conditions). Increase of small-scale local entrepreneurship and of the number of social climbers, should have a positive effect on these neighbourhoods as new, successful entrepreneurs and social climbers can set a good example for people that are still in a disadvantaged situation. In this case, it is important to mention that in order to create this effect, successful residents should be given a place within the neighbourhood itself, so that they will not leave the problem neighbourhood as a result of their limitations in further social climb.

A central theme is this, is the attraction of creative entrepreneurs, creating a new sector within the

neighbourhood economy. They should be given a clear and visible place within the neighbourhood, so they can contribute to social-economic integration of youth and other residents. Rotterdam-Zuid has potential employees, and entrepreneurs, that can act in the creative sector. Possible labour force is present, but they need to be involved, and in particular educated and trained, in order to contribute to the local, and eventually urban economy. The local sales market for creative entrepreneurs is limited, but perhaps there are leads for locally-aimed product and service development. On the scale of the city, there is already a clear potential sales market for creative entrepreneurs: companies specialised in manufacturing, trade and commercial services, companies related to the port of Rotterdam (industry and transport), and the healthcare and medical industry. So in order to guarantee the success of creative entrepreneurship in Rotterdam-Zuid, an important thing to do is to search for leads within and links with the local and urban economy.

Finally, this project aims at the kick-start, but not necessarily on rapid development. Most probably, the development of a strong creative cluster in Rotterdam-Zuid, will be a long-term process. But positive effects of creative initiatives and creative economic activity in Rotterdam-Zuid, on social-economic integration should be obtained within short term. Therefore the final strategy aims at strong and successful development and on clear image building, while the urban design will take the shape of the temporary development, but with a clear vision on future. This future will probably take its final form somewhere around 2040, but the preconditions are set in the earliest phase.

3.2 Project approach and methodology

To link the research question from the previous chapter to the aim of the project clearly, a certain order should be given to these questions, and they should be linked to certain research methods.

For a clear understanding, the main research questions relating to this thesis and the design are mentioned here again.

- » *Can creative industries or local entrepreneurs in general, contribute to social-economic regeneration?*
- » *How can local creative entrepreneurs contribute to the social-economic regeneration of Rotterdam-Zuid?*
- » *Where in Rotterdam-Zuid can we give physical shape to this contribution, in form of*

spatial planning and design?

First, a clear record of the social-economic situation in Rotterdam-Zuid should be given, and the leads that projects and policies such as *Pact op Zuid* and *Kwaliteitsprong Zuid* give to the project are to be clarified.

- » What are the social-economic problems in Rotterdam-Zuid?
- » What do current projects that aim on urban regeneration in Rotterdam-Zuid say about the approach this research aims at?

These questions are answered by means of municipal reports on the social-economic status of city and Rotterdam-Zuid, and by reviewing the project documents of *Pact op Zuid* and *Kwaliteitsprong Zuid*.

Theory will form the basis for the creative economy-based strategy that should contribute to urban regeneration. The following question will be answered, by reviewing scientific literature on these topics.

- » How can the neighbourhood economy, especially the creative industry, contribute to urban regeneration?
- » What are the (urban planning and design) criteria for a vital neighbourhood economy and the development of creative industries?
- » How do this type of strategy and this project relate to the city as a whole, regarding the urban economy?

In order to operate relevant views and theories in a specific context, the context, in this case Rotterdam-Zuid, should be mapped carefully. The socio-physical and spatial-physical situation is recorded, based on these questions.

- » How is the local economy shaped?
- » What is the spatial-physical structure of the area?
- » How is Rotterdam-Zuid imbedded in the city?
- » What are the potentials for the development of creative businesses in Rotterdam-Zuid; does the city have a certain policy on creative industry and are there relevant examples in Zuid and the city?
- » What is the link between Rotterdam-Zuid and the city in within this framework?

This research is based on a spatial urban analysis of Rotterdam-Zuid – also in relation to the city as a whole – and on urban policies and strategies related to creative industries in Rotterdam by reviewing municipal documents

The results of this research are combined into a strategy, aiming at urban regeneration in Rotterdam-Zuid involving the creative sector. This strategy is given physical shape, by pointing a location for the creative initiatives and the development of creative industries, by creating a (phased) development plan for this area, and an urban design plan, showing the image that the area should have within a few years, and showing its final form around the year 2040.

3.3 Societal and scientific relevance

Currently successful urban development is one of the main challenges of modern society worldwide (Department of Urbanism, 2013). Urban planning, design and development are the prime issues of urban policy-makers, planners and designers are dealing with. The urban and spatial assignment is focussing less on urban expansion, and more on strategic urban renewal. The central question here is: how can we improve the physical environment in order to improve social and economic conditions and opportunities of city-dwellers? Urban projects that act within this scope aim at sustainable solutions, which relate physical urban interventions with their social, economic and cultural context, and which anticipate on the changing demands its users and society, and on the dynamics of the city.

Although this thesis and urban design project are not based on this main question, this research reacts directly on this question. In this research the author has studied the urban problems of Rotterdam-Zuid, an area where at the moment the largest urban renewal-assignment of the Netherlands is located and where social and economic problems are severe (Team Deetman/Mans, 2011). The research is aiming at a sustainable solution for these problems. This sustainable solution is primarily formed by counteracting and reducing unemployment in the area, especially among young residents. This is done by:

- » providing good education and training which are directed at the changing labour market and at the demands of the local economy;
- » taking up the local economy as a starting point for social-economic development;
- » relating to the changing urban dynamics such as the upsurge of creative and small-scale businesses;
- » and the stimulation of encounters, participation and exchanges between residents, entrepreneurs and between both, providing each

other good examples, new chances and challenges and a positive vibe.

A sustainable solution demands long-term vision, involvement and investments. Quick interventions in the physical environment such as the improvement of public space and temporary developments such as economic ‘opportunity zones’ need to be combined with a widely supported vision on economic development and the creation of jobs and good educational facilities, which eventually contribute to the improvement of the social-economic situation of inhabitants. The support of social climbers is not only a goal, but also a mean in the further development of Rotterdam-Zuid. Local development, local bonding and the attraction of successful residents and entrepreneurs are of great importance. Example is better than precept.

This approach is following a trend that has been started a few decades ago, that led to an impressive change in the way urban policy-makers, planners and designers, as well as private parties deal with cities. As has been described in the previous chapter there has been shift in scale. The local, the small-scale and the private and individual initiative have gained great interest and focus. The change from acting on a global scale to acting on a local scale has been put into motion during the 1980s, in a period of economic downturn. Nowadays we are again in a time of economic crisis, and the paradigm of local action, particularly based on local initiatives, is still very relevant, as governments are withdrawing their top-down intervention and planning policies more and more. But within this paradigm, the global should not be neglected, as the local closely related to its urban, regional, national and international context. ‘Think global, act local.’

There has not only been a shift in scale (based on place and time) and geographical location; also the subject of urban renewal has changed during the last thirty years. During the 1970s and 80s urban renewal was mainly based on physical restructuring and the improvement of housing conditions in deprived neighbourhoods, but as of today the social-economic situation in many of these renewal areas is still problematic. Many urban neighbourhoods are dealing with underprivileged residents (e.g. low educated, low incomes, unemployed), among which there are many youngsters and immigrants; with low levels of participation in education, work, and society; and with social segregation, selective migration, economic regression and poor liveability. Nowadays the focus of

urban renewal policies is especially aiming at improving the social-economic conditions among these residents. Here lies a great challenge, as in general social-economic conditions cannot directly be improved through physical interventions in the built environment; while housing conditions and the quality of the living environment can be improved more easily. Improving the latter two does eventually contribute to social-economic regeneration, but are not the only means, and moreover, are not enough to achieve this, and moreover often go hand in hand with heavy investments.

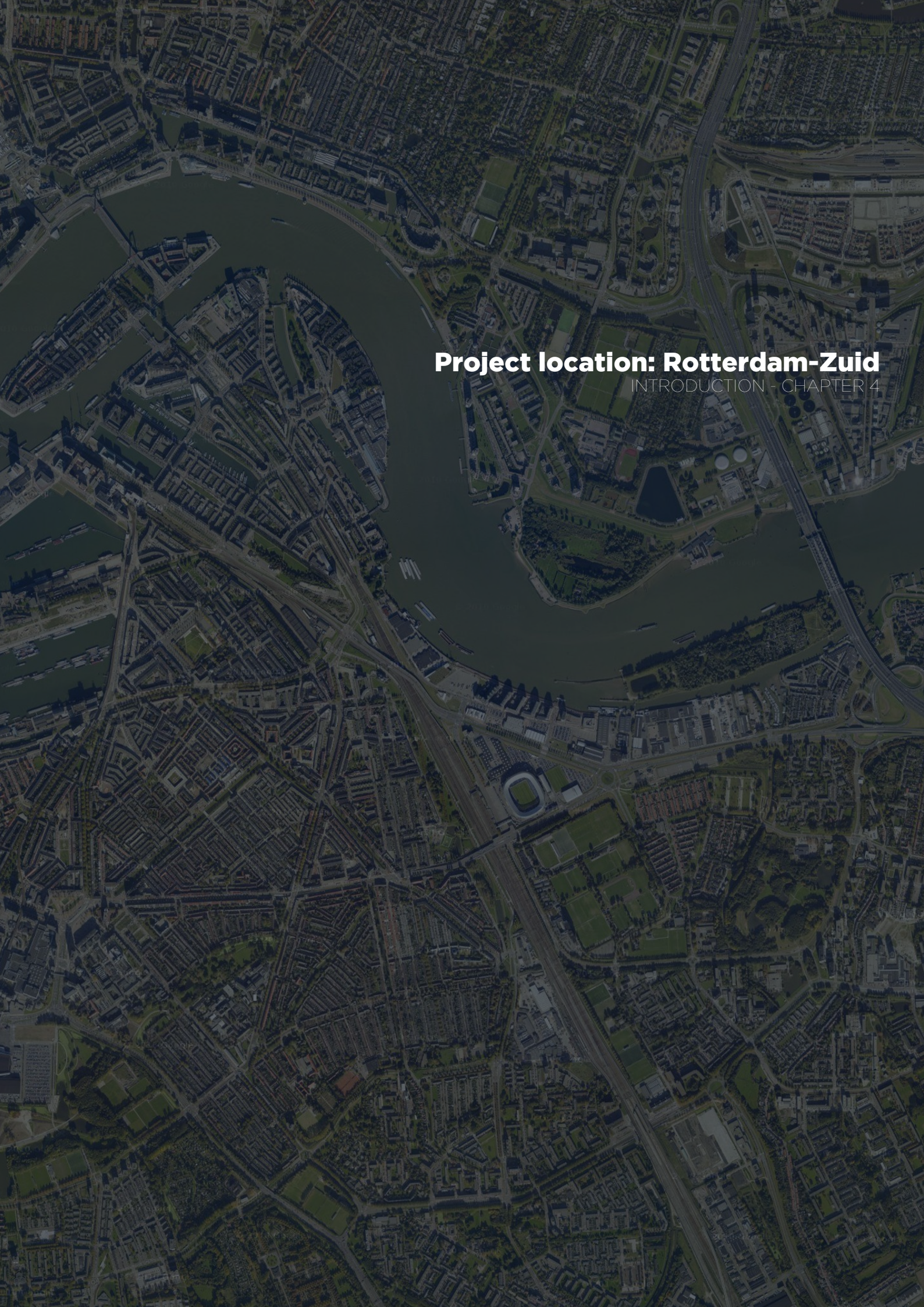
Thus, urban policy-makers, planners and designers, as well as other public and private parties have to look for other means that can contribute to the improvement of the social-economic situation of residents in deprived neighbourhoods.

The particular scope and paradigm of this graduation project rests both on the scope of current-day policy and practice of interventions in the built environment, and rests on the scope of modern academic practice in the field of urban planning and design, which tends to focus on thinking, planning, designing and developing within the certain array of urban challenges, which is mostly relate to urban renewal, development within the contours of the city, and the improvement of social-economic conditions in the built environment.

Recently one of the branches of both academic research as well as of governmental inquiry and policy is focussing in the neighbourhoods economy and its contribution to urban renewal, and on the growth and retention of small business, start-up companies and freelancers, for which for example act in the creative sector.

This thesis makes use of many governmental and scientific sources that present questions, assignments and solutions on the role of local economic dynamics in urban renewal. In this research the author tries to make the available knowledge on economy-driven urban regeneration – emphasising on the neighbourhood economy, creative industry and talent development – operational in order to develop a strategy for the renewal of a part of Rotterdam-Zuid, as well as the improvement of local social-economic conditions. The research concludes with a strategy and urban design plan for a part of Rotterdam-Zuid that incorporates the aspects of this research.





Project location: Rotterdam-Zuid

INTRODUCTION - CHAPTER 4



Satellite image of Rotterdam-Zuid (Google Maps, 2013)

Project location: Rotterdam-Zuid

The final product of this research is a strategy on urban regeneration by means of creative talent development, and an urban design plan for a part of Rotterdam-Zuid that incorporates the local economic development strategies that are designed based on this thesis. During this project, a location has been researched where these developments should take place. This location is formed by the area, for which currently already an urban design plan has been developed called 'Parkstad', and by its direct surrounding neighbourhoods and the location along the river Nieuwe Maas, called Maaszicht. The Parkstad plan has been developed from a study in 2000, to a concept plan in 2004 and final urban design in 2009 (Team Bestemmingsplannen, 2011). The plan made by the municipality will be discarded in this graduation project, and a new plan for the area, in combination with a plan for the zone along the Nieuwe Maas and for the edges of the surrounding neighbourhoods will be made. However, some of the strong elements of the plan for Parkstad will be discussed in this chapter, and their incorporation will be considered. But first the historic development of Rotterdam-Zuid and the project location are described, followed by a description of the social-economic dynamics in Rotterdam-Zuid, and the urban problems related to them. Thereafter, the strategies, policies and projects of *Pact op Zuid* and *Kwaliteitsprong Zuid*, as well as the plan for Parkstad are discussed.

- [4.1] the first harbours of Rotterdam-Zuid (Beeldbank RWS,1013)
- [4.2] Afrikaanderwijk in 1977 (Vanamen, 2013)
- [4.3] Waalhaven (De Kunstclub, 2013)
- [4.4] Zuidwijk (Picasaweb, 2013)



4.1 Historic development of Rotterdam-Zuid

The origin of the dynamics and problems of Rotterdam-Zuid lie in the historic development of the Rotterdam port (Team Deetman/Mans, 2011; Stadsontwikkeling, 2011). Until around 1870 city and port were located on the dense northern bank of the Nieuwe Maas river. When the port started to develop rapidly during the end 19th and the beginning of the 20th century it expanded towards the southern banks of the river [4.1]. This expansion created the necessity to attract new labour forces to the city. From the 1870s onwards the building of neighbourhoods with cheap housing for migrant harbour employees started [4.2]. Also north of the river housing for harbour workers was constructed. Between 1880 and 1940 the old, pre-war neighbourhoods of Rotterdam-Zuid were constructed. These neighbourhoods form the location for the urban regeneration strategy. The problems in Rotterdam-Zuid started to appear after the Second World War.

The port activities started moving westwards because of upcoming mechanisation and the up-scaling of harbour industries [4.3]. These trends caused a decrease of the number of jobs in the port. Another problem appeared when Rotterdam started attracting foreign-born and disadvantaged inhabitants moving into the cheap housing in Zuid and other similar parts of the city. Unemployment rates started increasing. The combination of the decline of employment, a poor and disadvantaged population and the cheap low-quality housing stock causes a major deterioration of living conditions and the increase of social-economic problems in Rotterdam-Zuid. After WWII also the building of new modernist housing areas was started [4.4]. First to house the citizens that wanted to leave the overcrowded pre-war neighbourhoods. Later these neighbourhoods shared the same fate as the cheap housing areas before WWII.

Rapid increase of problems in Rotterdam-Zuid

About ten years after WWII the Rotterdam-born population slowly stopped working in the port industries and other low-paid industries. Cheap labour forces from the Mediterranean countries and the Dutch colonies were attracted as guest workers in these industries. A multi-ethnic class started to rise and the segregation in Rotterdam increased because of selective migration. Attractive growth centres such as Spijkenisse and Cappelle aan den IJssel were built around the city of Rotterdam which caused middle-class, well-educated autoch-

thonous people to leave Rotterdam-Zuid and other disadvantaged neighbourhoods. Problems with safety, social cohesion and participation increased. During the 1980s urban renewal projects in problem neighbourhoods were started. The low-quality houses were renovated and transformed into social housing [4.5]; in addition run-down housing blocks were demolished and replaced by new cheap social housing blocks [4.6]. This housing policy attracted even more disadvantaged, low-income residents. The city government initially wanted to attract social climbers to these neighbourhoods, but this desired social transformation failed to occur.

In the 1990s a large urban renewal project was started on Kop van Zuid, the area south of the Nieuwe Maas river close to the city centre. With this project the oldest harbour areas on Zuid [4.7] were transformed into modern, mixed urban areas [4.8] attracting wealthy and well-educated people and large companies to the luxury office towers. The social-economic contrast between Kop van Zuid and the rest of Rotterdam-Zuid is very large. Yet on Katendrecht and in the post-war Modernist neighbourhood of Pendrecht urban renewal is starting to show good results. These areas are slowly transforming into popular housing areas attracting more wealthy residents, gradually resulting in gentrification. Other areas in Rotterdam-Zuid are still under stress.

Former harbour areas along the river which are becoming vacant for new developments and harbour and industrial areas strategically located nearby residential areas but which are still operable are ideal locations for new developments that boost the regeneration of the borough. But also in-neighbourhood locations for spatial interventions that boost the social-economic urban regeneration of Rotterdam-Zuid should be sought. One of these locations is Parkstad.

The development of the Parkstad area

For centuries Rotterdam-Zuid, including Parkstad, was countryside with farmers and small villages (i.e. Charlois, Katendrecht and IJsselmonde) and other small settlements such as Hillesluis. At the end of the 19th century the Nieuw Waterweg was created, boosting the development of the port of Rotterdam. Between 1873 and 1905 the harbours in Rotterdam-Zuid were constructed. The area where the harbours were constructed was situated within the flood zone of the river, and the still is. Also the major part of Parkstad area lies in the flood zone, on the river side of the Hilledijk. Today, the urban physical structure of the harbour area is strongly influenced by the way the harbours



[4.5] renovation of housing in Afrikaanderwijk (author's own)
 [4.6] replacement-housing in Feijenoord (author's own)
 [4.7] Kop van Zuid before transformation (Skyscraper-city, 2013)
 [4.8] Kop van Zuid (Skyscraper-city, 2013)



[4.10] birds eye view of Parkstad (authors own)



were constructed during the 19th and early 20th century, namely parallel to the dike system. The strong linear structure of Parkstad and Laan op Zuid, the boulevard that cuts right through the area, is a clear remnant of this development (Team Bestemmingsplannen, 2011). This connection is very strong, while cross connections between Parkstad and adjacent areas are very weak as a result of the sequence of infrastructural barriers (e.g. dikes, Laan op Zuid, harbours). In the *polders* behind the dikes, such as this Hilledijk, housing areas were constructed, in order to cope with the massive influx of harbour workers.

Besides dikes, harbours and main roads, another major infrastructural element is the railway line between Rotterdam and Dordrecht, opened in 1877. This north-south line lies slightly oblique to the harbours. The Parkstad area, was the location of a large railway yard for industrial trains, that was connected to the main railway line. As a result of the technical and economic developments of the second half of the 20th century, which were already mentioned earlier in this section, businesses and industries moved towards the larger harbour areas in the west, and thus the area became obsolete. The former harbour areas remained undeveloped for a while, forming a desolate industrial area

between residential neighbourhoods Feijenoord and Afrikaanderwijk.

In the 1970s and 80s the neighbourhoods adjacent to the harbour area went through a period of urban renewal, during which was characterised by '*bouwen-voor-de-buurt*'. And in 1990 the development of Kop van Zuid started, creating a mixed urban environment shaping new connections between the different neighbourhoods and the rest of the city. The development of the former industrial areas was halted before Parkstad, the southernmost part of the Kop van Zuid plan, was constructed.

4.2 Social-economic dynamics

Rotterdam-Zuid, constituting the boroughs (*deelgemeenten*) of Feijenoord, Charlois and IJsselmonde, is dealing with severe social-economic problems (Stouten, 2010; Team Deetman/Mans, 2011; Cluster Maatschappelijke Ontwikkeling, 2012). The problems in IJsselmonde are clearly less harsh than in the other two boroughs. It seems that the urban problems of Rotterdam mostly concentrate south of the Nieuwe Maas, but also north of the river there is a borough that deals with severe social-economic problems: Delftshaven. The problem neighbourhoods this project is dealing

with are Feijenoord, Afrikaanderwijk, Bloemhof and Hillesluis.

Social index

Many of the social-economic problems in Rotterdam-Zuid are related to deficiencies in education, employment and personal wealth. The average score of Rotterdam on the social-economic index of 2012 is 5.5, while the scores of Feijenoord (4.7), Afrikaanderwijk (4.6), Bloemhof (4.4) and Hillesluis (4.5) are far below this average (Cluster Maatschappelijke Ontwikkeling, 2012). During the last years, these scores haven't changed; no progress in the social-economic development can be seen based on these figures. The low scores of Rotterdam-Zuid on the social-economic index of the city of Rotterdam relate especially to the lack of capacities and social contact.

The residents of Feijenoord, Afrikaanderwijk, Bloemhof and Hillesluis miss certain capacities. The language proficiency is very insufficient; the level of education is slightly insufficient. As a result of the lack of appropriate education and training, and poor access to the labour market, incomes in these neighbourhoods are low, resulting in poverty. This is often the result of the lack of willingness to participate in education and work, as stimulation, promotion, motivation, but also opportunities as missing. Also the health standard is below average. As a result there is lack in participation in education, work, and social and cultural activities. Yet, some residents do show high social commitment, especially in Afrikaanderwijk and Hillesluis. Social commitment in Feijenoord and Hillesluis is moderate to low. Despite the high level of social commitment among a fraction of the residents and the relatively low degree of mutations among the local population, inhabitants of the four neighbourhoods do not experience enough social bonding. Perhaps this lack of social bonding is caused by cultural differences, and probably also by the lack of overall capacities resulting in limited participa-

tion and poor perspectives. In addition, the quality of the living environment is low, caused by high levels of discrimination, poor housing conditions, moderate amenities and a relative high degree of pollution and nuisance.

Surrounding neighbourhoods as Tarwewijk (4.3) and Vreewijk (5.2) also core below average, while Katendrecht (5.7), Zuidplein (5.9), Groot IJsselmonde-Noord (5.7), Oud IJsselmonde (6.6), Kop van Zuid-Entrepot (5.6) and Kop van Zuid (6.1) score slightly above or well over average.

The problem neighbourhoods of Rotterdam-Zuid do not only show very low scores on the social index, but also on the safety index. In 2011, the Rotterdam average on this index in 7.5, while the four neighbourhoods are among the lowest scores of the city ranging between 6.1 in Feijenoord to 4.5 Bloemhof (Cluster Maatschappelijke Ontwikkeling, 2012). In the safety index Tarwewijk and Zuidplein also have very low scores, while Vreewijk and Groot IJsselmonde have sufficient scores, but below the city's average; Katendrecht, Oud IJsselmonde, Kop van Zuid-Entrepot and Kop van Zuid have very good scores on the safety index.

Demographics

The low housing prices and the low rents in social housing in Rotterdam-Zuid attract many less fortunate residents, with a weak social-economic background. The housing prices, in 2010 slightly above €113,000, are far below the national average (€243,000) and the Rotterdam average (€161,000) (CBS, 2011). Not only are the housing prices and rents very low, furthermore are problems on the local housing market are the small size and bad physical state of the dwellings, and the low quality of the living environment. Social climbers tend to leave the area, as dwellings and living environments that meet their demands are not available in their 'home' neighbourhoods and a local housing career is not possible (Hoppesteijn, 2009; Team

	NETHERLANDS	ROTTERDAM	7 WIJKEN
inhabitants (2010)	16,574,990	593,050	75,735
% residents <23 years old	27	26.9	40
% western immigrants	9	11	10
% non-western immigrants	11	37	62
mean income per year (euros)	34,300	29,200	24,000
% unemployment	6.3	8.3	11.3
% household below poverty line	7	13	19
% vocational/higher education (mbo/hbo)	72	62	46
% VWO	22	16	12
% early drop-outs	7.5	18	23
% children in primary school with low educated parents	13	34	52
safety index	-	7.3	5.1
social index	-	5.8	4.9

[4.10] table with comparison of social indices (numbers from Ministerie van Binnenlandse Zaken 2011; CBS 2011)

Deetman/Mans, 2011). As a result of this selective migration the well-educated, wealthy and successful leave, in addition these neighbourhoods are not able to attract middle and higher class residents. The population of Rotterdam-Zuid has some very distinct characteristics [4.10]. The average income among residents in the seven most problematic neighbourhoods (i.e. Bloemhof, Hillesluis, Afrikaanderwijk, Feijenoord, Tarwewijk, Carnisse and Oud-Charlois) is €24,000 per year, which is about €5000 less than the city's average and €10,000 less than the national average (Stadsontwikkeling, 2011). In 2010, the percentage of households in these neighbourhoods living below poverty line was around 19% (compared to Rotterdam 13% and The Netherlands 7%).

In 2010 the unemployment rate was 11.3%, while in Rotterdam this was 8.3% and in the Netherlands 6.3%. In 2012 the unemployment rate in Rotterdam raised up to 12.6%, while in the Netherlands the unemployment rate was 6.4% (CBS, 2013a). For Rotterdam-Zuid numbers are not available, but we can assume that the unemployment rate in this part of the city probably rose rapidly as well. In the Netherlands, especially unemployment among the population of foreign descent is very high. In 2012 15.5% of all non-western immigrants was unemployed, while this rate is 5.0% percent among natives (CBS, 2013b). The unemployment rate rises more quickly among immigrant than among natives, although historic figures point out that when the economy grows again the number of unemployed among immigrants drops quicker as well.

Especially among immigrant women and youth the rates raise very quick. In 2012 as much as 28.4% percent of all immigrant youth was out of work, in 2011 this percentage was 23.4%, and

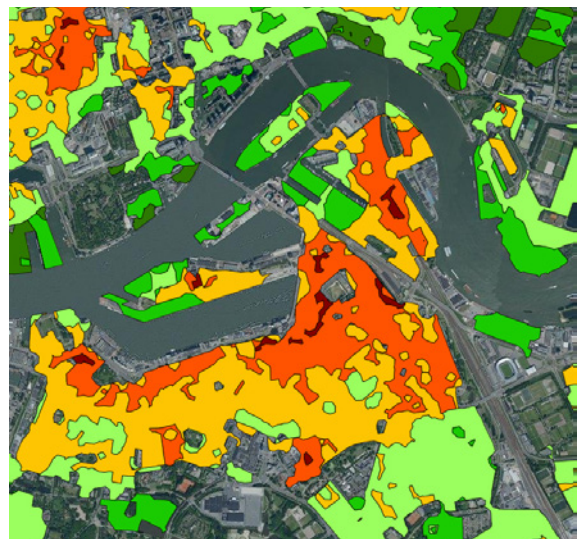
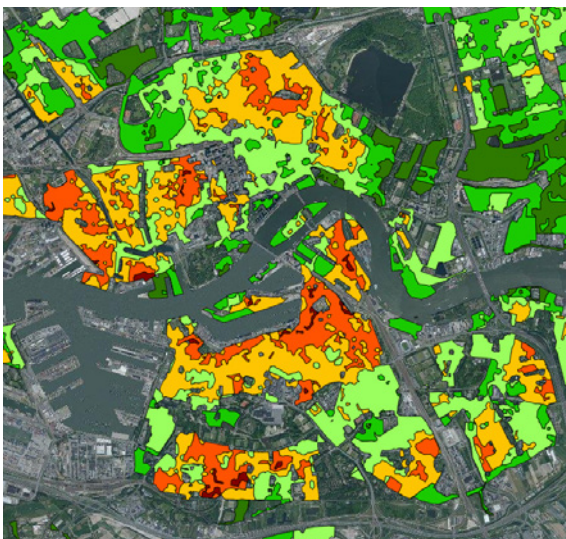
among native youth unemployment grew from 7.7% to 9.8%. The number of jobs in Rotterdam-Zuid is low. About one fifth of the jobs in the city is located in this area, while about one third of the population lives in Rotterdam-Zuid (Team Deetman/Mans, 2011).

The population in Rotterdam-Zuid is relatively young compared to Rotterdam and the rest of the country. 40% of the population in the seven problem neighbourhoods is younger than 23 years (Rotterdam 26.9%, Netherlands 27%) (Stadsontwikkeling, 2011). The number of early school drop-outs is relatively high, 25%, versus 18% in the rest of the city and 7.5% in the country as a whole. As a result a quarter of the youth leave school without any qualification. The unemployment rate among youth in Rotterdam-Zuid is very high (Team Deetman/Mans, 2011). Among children in primary school, the number of low-educated parents is very high: 52% (Rotterdam 34%, Netherlands 13%).

The overall level of education is low as well. The number of higher educated is relatively low: VWO 12%, respectively 16% and 22%, and MBO/HBO 46%, respectively 62% and 72%. The low levels of education are partially due to the low language proficiency. The language problems influence the performance of students from preschool and primary school to secondary education and vocational education. About 30% percent of the students in primary school suffer from language deficiency. Not only the youth is a population group that needs to be taken into account in Rotterdam-Zuid; there is also a large groups of residents with a foreign background. In the seven problem neighbourhoods about 72% is of foreign descent, of which 62% is of non-western descent (e.g. from

[4.11] liveability index Rotterdam in 2010 (Leefbarometer, 2013)

[4.12] liveability index Rotterdam-Zuid in 2010 (Leefbarometer, 2013)



so from Africa, Latin-America, Asia or Turkey, and not from Europe, United States, Canada, Australia, New Zealand or Japan). In Feijenoord and Afrikaanderwijk the percentage of non-western immigrants lies even between 75 and 80%. In Rotterdam and the Netherlands the percentage of non-western immigrants are respectively 37% and 11%.

Liveability index

The social-economic situation in Rotterdam-Zuid is reflected in the liveability index of the city [4.12]. The liveability in Rotterdam-Zuid is under great stress by social-economic, but also by spatial-physical problems such as problems concerning housing, accessibility and environmental quality. The liveability of an area is measured by 49 indicators varying from housing and services to quality of public space and social coherence (Leefbarometer, 2013).

The liveability in many parts of the city is under great stress. In Rotterdam-Zuid, the liveability index is very low in Feijenoord, Afrikaanderwijk, Hillesluis, Bloemhof, Tarwewijk, Carnisse and Oud-Charlois [4.11], as well as in the neighbourhoods south of the Zuiderpark and in parts of Katendrecht, Lombardijen and IJsselmonde. Kop van Zuid, Noordereiland, Vreewijk and large parts of Katendrecht, Lombardijen and IJsselmonde show moderate to very positive in the liveability index.

4.3 Plans for the area

During the last ten years, different plans were made to tackle the poor social-economic situation and the related physical problems in Rotterdam-Zuid. In this paragraph the problems that were addressed in *Pact op Zuid*, *Kwaliteitsprong Zuid* and in the plan for Parkstad, as well as the solutions they provided related to the economic situation of residents and entrepreneurs will be discussed.

Pact op Zuid

In 2006 the investment program *Pact op Zuid* was created by the municipality, borough councils and housing corporations. The program includes many projects and involves many different actors, including also the national government, schools and educational institutions, residents' associations, entrepreneurs' organisations, and health care and welfare organisations, which are geared to one another by this program. The program is introduced to tackle the major urban problems in the area, and to seize the opportunities in Rotterdam-Zuid that can turn it into a strong area for living, working

and recreation (Stuurgroep Pact op Zuid, 2006).

The program aims at powerful neighbourhoods that offer perspective to residents and to entrepreneurs. Government and market parties should combine their efforts to tackle the high unemployment rate and the vacancy of business spaces, among other things by the promotion of entrepreneurship among the large group of young, ethnic residents. Elements of the program that should contribute to the improvement of the social-economic situation is the stimulation of social bonding, and improving education, sports and recreation, as well as health care facilities. These improvements should contribute to the resilience of the residents and create personal development chances for current and future residents. Investments are needed in HAVO/VWO as well as vocational education (MBO/HBO), and the efflux of students should be reduced. Important is the link between education and the business community; practice-based learning should be stimulated and linked to the current economic demand.

Other investments relate to housing (e.g. improvements in quality and differentiation), living environment and public space, retention of seniors, and character of the entrances to city and neighbourhoods.

Pact op Zuid points out five locations where urban development offers an integral approach towards social, economic and physical growth. These locations have strong links to the neighbourhoods in Zuid, but also to the city as a whole and the region. These sites are: Sporthart Rotterdam/Stadionpark (sports, leisure), Ontspanningscluster Zuiderpark en Ahoy (leisure, recreation, culture), Knooppunt MCRZ (health care, welfare), Eat & Meet (entertainment and leisure), and A-15 zone/Stadshavens (technology, logistics, industry). These areas, named 'VIP-projects', should contribute to increased entrepreneurship and employment, as well as to the increase of business investments. Another VIP-project is Kop van Zuid, which is aiming at the further development of two living environments: city centre living and quiet urban living.

One of the keys towards successful participation in education and work, and the integration of youth in society, is the improved integration of learning, training and employment. Especially the links between vocational education (VMBO and MBO) and the business community should be improved. Through internships youth is able to orientate and get to know the practical aspects of their profession, in order to develop themselves as well as their practical skills, and to shape clear and con-

crete future perspectives. This cooperation should be concentrated in specific economic clusters. Continuous learning and training paths should be created from VMBO to MBO to jobs, combined with internships and job opportunities. Local learning-working combination in Rotterdam-Zuid are: Campus Slinge (combining VMBO and MBO), MCRZ/Station Lombardijen (health care and welfare education and training), De Kuip/Stadionpark (leisure and sports), Zuiderpark (trade, economy and leisure), and Waalhaven/Heijplaat (technology, logistics and harbour-related activities such as shipbuilding).

Vibrant local economic activity and the involvement of the business community in social-economic regeneration are not only relevant in relation to education and the development of perspectives for youth; they also contribute to the encouragement of entrepreneurship, and to the overall liveability and liveliness in the neighbourhoods.

According to Stuurgroep Pact op Zuid (2006) the emphasis in the local economy should lie on innovative production, and on consumer and commercial services. Among the young and multi-ethnic population, there are many residents, especially among the Turkish and Surinam community, with a strong entrepreneurial mindset. Rotterdam-Zuid is characterised by the larger number of start-up companies. In order to stimulate (starting) entrepreneurs and local economic development, eight neighbourhoods in Zuid were designated *kanszones*, 'opportunity zones'. Among these neighbourhoods were Afrikaanderwijk, Bloemhof and Hillesluis. In these zones the municipality gives advice and financial support to owners of business real estate and to entrepreneurs, when they invest in their property or company. These areas have proven to be very successful in terms of their contribution to their contribution to economic development. They also have three indirect, but important effects: the improvement of the liveability and liveliness in the surrounding neighbourhoods, the creation of new role models, and their contribution to participation and self-confidence of residents (Dorenbos *et al.*, 2009).

A vibrant neighbourhood economy, by investing in the economic activity in neighbourhoods, can improve the liveability in neighbourhoods in Zuid. New and high-quality business and more jobs raise the attractiveness of neighbourhoods and creates new perspectives for its residents. Commercial and local consumer services are the prime driving force behind the growth of local employment. (Stuurgroep Pact op Zuid,

2006)

Kwaliteitsprong Zuid

In 2009 a national program was launched, specifically aimed at Rotterdam-Zuid. *Pact op Zuid* was based on small-scale projects and interventions, while the new programme, which was initiated by the national government, was based on large-scale renewal (Platform 31, 2013a). The main points of this new approach are:

- » the imperfect housing market;
- » the lack of value growth in the housing market;
- » the social-economic situation;
- » the link between neighbourhoods, VIP-projects and the planned transit corridor 'Zuidtangent'. (Team Deetman/Mans, 2011)

Starting from *Pact op Zuid*, three points of improvement were assigned. According to Team Deetman/Mans it is important to have a shared vision and a programmatic long-term plan on the development of Rotterdam-Zuid. Coherence and prioritisation between the abundance of initiatives and project that are executed in Rotterdam-Zuid is insufficient. Secondly, a neighbourhood-focused approach to the problems is stressed; neighbourhood managers should be appointed. And last but not least, local residents and entrepreneurs should become more involved in the development and realisation of projects on the level of the neighbourhood. The team also adds that the essence of urban regeneration in Rotterdam-Zuid lies in effects that last. It will probably take years before the effects of all the efforts become visible and measurable.

The starting point of *Kwaliteitsprong Zuid* is formed by the ambitions of residents and local entrepreneurs. Social mobility is of great concern for cities, from a social-economic and from an economic point of view. In order to boost and facilitate social mobility, the program aims on three different pillars of development and eight priorities.

A. *Talent development:*

1. eliminate language deficiencies;
2. create continuous learning paths;
3. develop 'soft skills' among working population.

B. *Economic strengthening:*

4. stimulate local entrepreneurship;
5. concretise economic drivers.

C. *Physical quality improvement:*

6. remain basis level of 'clean, undamaged and safe';

7. improve the quality of private property housing;
8. restructure the private housing stock.

In this thesis, the focus will be on the first two pillars: talent development and economic strengthening. Talent development aims at the exploitation of the qualities of youth in Rotterdam-Zuid. In order to utilise their talent, language proficiency, education and training, and the development of 'soft skills' (e.g. being on time, perseverance, decency, listening, organising and effectiveness) are essential. During the coming decades, according to Team Deetman/Mans, the city of Rotterdam will need the enormous labour potential that Rotterdam-Zuid is offering. In the future there will mainly be a demand for middle and higher education employees in the midtech and health care industry (Stadsontwikkeling, 2011). Other important economic sectors in Rotterdam are energy, chemical industry, logistics, water management and creative industry.

On the other hand, the youth deserves a place in the labour market; besides from that the reduction of unemployment will improve social-economic conditions and overall liveability in Rotterdam-Zuid. From this point of view, the development of continuous learning and training paths (which were already introduced by *Pact op Zuid*) is essential. New neighbourhood schools and vocational schools, such as a school for international business and trade or technical schools (*technasium*), should be built, combined with business space for allied entrepreneurs. Schools should especially aim at providing education, that relates to the market demand (e.g. technology and health care), and on job relevant job orientation.

The second important pillar is the improvement of the local economy. In relation to the prior, a flourishing and visible neighbourhood economy is an important condition for orientation and perspective on talent development and employment (Bureau Buiten, 2009 in: Team Deetman/Mans, 2011). At this moment Rotterdam-Zuid does not offer enough possibilities for starting and growing enterprises to settle within the neighbourhood. There is an oversupply of low quality retail with poor investment and development potential (Stadsontwikkeling, 2011). As a result the appearance of the neighbourhood economy is quite poor, which does not contribute to the liveability in the area.

The research by Bureau Buiten, states that, the economic value of local entrepreneurship is perhaps limited, but from a social-physical perspective local economic activity can have major contribu-

tion to an attractive living environment. Yet, the importance of the neighbourhood as an incubator for new entrepreneurship should not be underestimated; examples are the Creative Factory, and initiatives along Piekstraat in Feijenoord and Motorstraat nearby Zuidplein.

The local economy cannot provide enough perspective to address the labour potential Rotterdam-Zuid offers. Therefore, other strong economic clusters and sectors should provide the youth of Zuid to develop their talent. Examples given by *Kwaliteitssprong Zuid* are: the Rotterdam Climate Initiative, the VIP-projects, and larger businesses in the region such as the Port of Rotterdam and The Greenery.

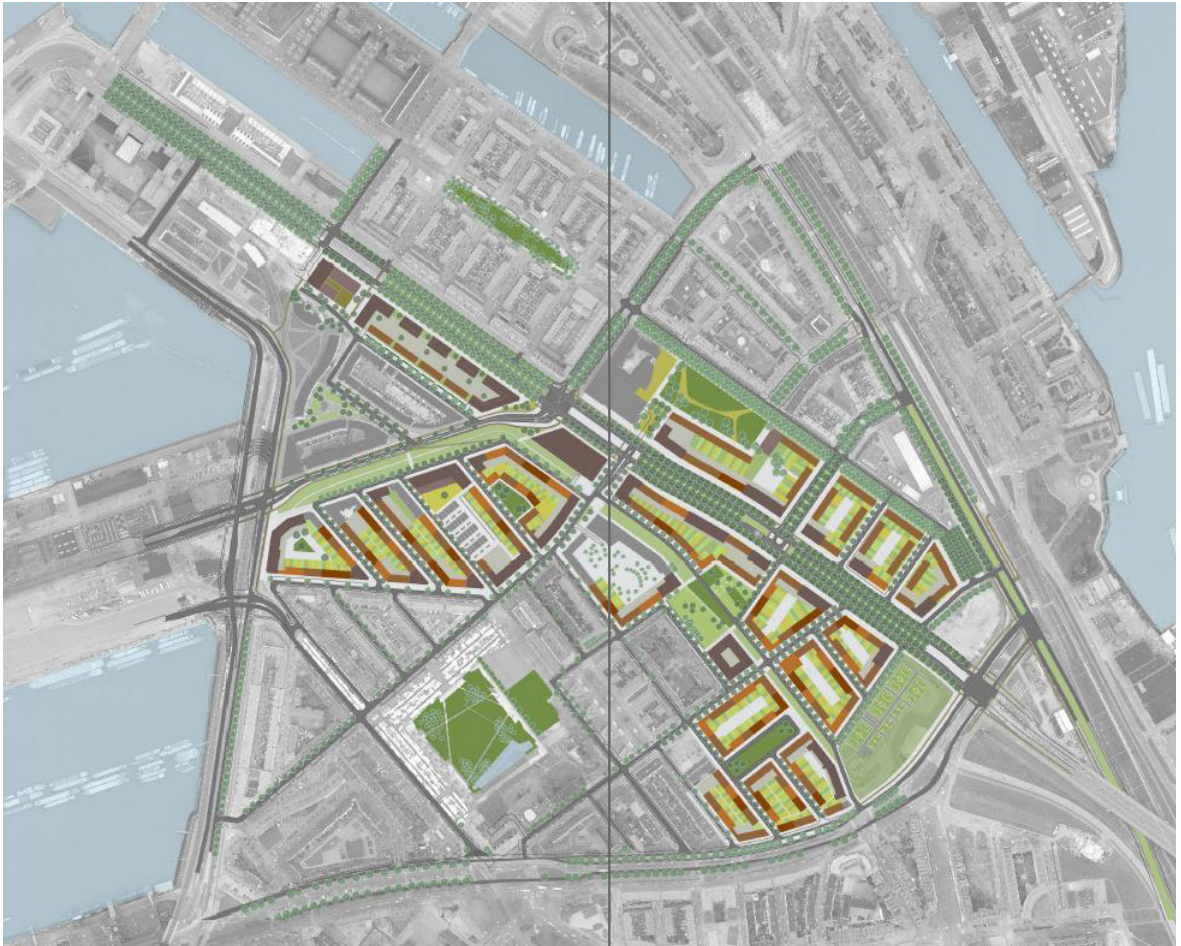
Policies on local entrepreneurship should focus on the following: combine of living and working, relate the characteristics of the neighbourhood to entrepreneurship (e.g. creative industry, trade and handicrafts), create a attractive business climate (i.e. *kansenzones*) and involve established enterprises located in Rotterdam-Zuid.

The other aspect of economic development is the concretisation of local economic drivers. Rotterdam is the 'Gateway to Europe'. Rotterdam-Zuid is strategically located on economic axes: Amsterdam-Antwerp and Rotterdam-Ruhr Area. The urban harbour areas called Stadshavens offer the possibility to create new jobs during the coming years. New economic opportunities can be found in the development of new, innovative, sustainable technologies related to energy, industrial production, transport and harbour-related activities; think in terms of 'climate adaption', 'cleantech', 'midtech' and 'delta technology'. An example of combining education and employment in the Stadshavens area is the RDM Campus on Heijplaat. Other economic drivers were already pointed out by *Pact op Zuid*, these are the VIP-project, which are currently being developed into strong, specialised economic clusters. A problem concerning the wider urban labour market is the lacking physical accessibility of non-local jobs. In order to improve the accessibility of employment in the city and region the public transport network in Rotterdam-Zuid should be improved, by creating more and better transit connections (tram, metro and rail) with urban and regional economic clusters. An example is the creation of a intercity railway station in Rotterdam-Zuid and a new tangential tram or metro connection between the campus of Erasmus University Rotterdam, Stadionpark, Zuidplein and Waalhaven. The completion of the latter is currently envisioned somewhere around 2020 (Pro-

[4.13] former plan for Parkstad by KOW (Skyscraper-city, 2013)



[4.14] current plan for Parkstad by Palmhout (Skyscraper-city, 2013)



jectorganisatie Rotterdam Vooruit, 2010).

Parkstad

When the plan for Kop van Zuid, including Parkstad, was initiated in 1991, the primary aim was: “all measures serve primarily the redevelopment of the planning area, from an outdated harbour area into a high-quality inner-city area, which – with its own unique identity – forms a spatial and functional addition to the existing city centre, but which also connects to the framework of urban renewal areas on the southern banks of the river” (Team Bestemmingplannen, 2011). With the realisation of most parts of the plan for Kop van Zuid during the 1990s and early 2000s, this jump across the river has been established. A new metro station, a tramline connecting the city centre and Rotterdam-Zuid, a concentration of offices, schools and a theatre, and most important the Erasmus Bridge were constructed. In addition new living environments with mainly middle and upper class housing were created. But a clear social-physical relationship between Kop van Zuid and Rotterdam-Zuid was not created.

Initially Parkstad was seen as an important future node in the regional network of the Randstad or ‘sterlocatie’. The plan included a high concentration of offices and housing, fitting the areas regional importance, a new urban park extending from Afrikaanderplein to the banks of the river, and the relocation of the railway station Rotterdam-Zuid [4.13]. Parallel to the development of the plan for Parkstad, a study was carried out on a new connection between Rotterdam-Zuid and the north, crossing the river between the Parkstad area and De Esch in Kralingen. Until now no final decision has been made on the construction of this new bridge named *Derde Stadsbrug*, while also other possibilities such as a ferry have been discussed. In 2005 the municipality concluded that this plan for Parkstad was financially unfeasible.

The new plan for Parkstad, which is made between 2006 and 2010, focussed more on the relation and physical connection between the plan and Afrikaanderwijk (Team Bestemmingsplannen, 2011). This new plan incorporates two small parks, and, in contrast to the previous plan, mostly single-family housing [4.14]. In this plan the connection between Parkstad and the surrounding neighbourhoods of Kop van Zuid and Afrikaanderwijk are important. The physical barriers of Hilledijk and Laan op Zuid are imbedded in the plan, reducing their fragmenting effect. New connections and routes are created between Afrikaanderwijk

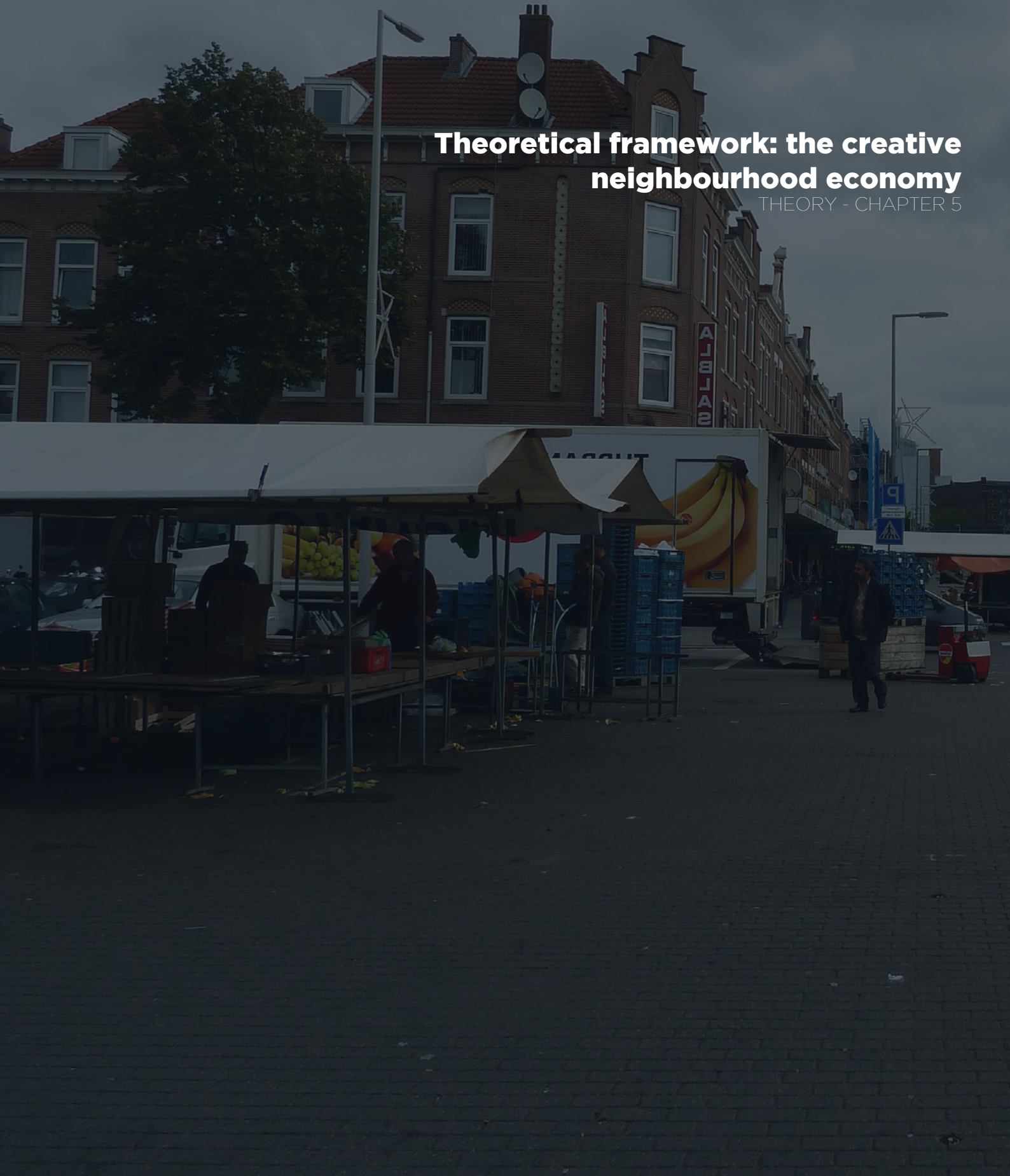
and the neighbourhoods of Kop van Zuid, and in order to create seamless connection between the areas a block typology has been chosen that characterises surrounding neighbourhoods, namely the enclosed urban block. Also along Laan op Zuid, some single-family housing is planned, but in higher buildings in order to give this boulevard a strong urban quality. Besides a maximum of 1.600 houses (with an average floor area to 150 square metres), the plan allows a maximum of 50.000 m² of non-residential functions; such as retail, a HAVO/VWO school and dwellings combining living and working in the northern part, sports facilities (swimming pool, sports centre) and commercial spaces in the central area, and along Laan op Zuid and the connecting side-streets in the southern part there is room for social services, an elementary school, retail, consumers services, small offices and workshops for ‘creatives’ and craftsmen.

But, one of the problems that the author has encountered when reading the programs for *Pact op Zuid* and *Zuid Werkt!*, which are central documents in tackling the problem in Rotterdam-Zuid and provide a clear direction based on the social-economic situation, is that these programs do not provide clear starting points for urban planners and designers. So, based on the vision that they provide that includes talent development and economic strengthening, can this vision be completed with clear spatial-physical interventions based on urban planning and design? Because, this is eventually the field of study and in particular the field of activity of urban planners and designers, and of architects as well.

Also the position the Parkstad area, which is strategically located between the problem neighbourhoods and parts of the city that provide interesting leads for urban development and regeneration (e.g. Kop van Zuid, the inner city, Stadionpark), in strategies on the development of Rotterdam-Zuid is not clear. The fact that the area is now very much empty, and its strategic location form a great opportunity.

Theoretical framework: the creative neighbourhood economy

THEORY - CHAPTER 5





Afrikaandermarkt (author's own)

Theoretical framework: the creative neighbourhood economy

At the moment there are many projects aiming at urban regeneration through economy-related initiatives, such as the redevelopment of shopping centres, construction of living-working units and support-programs for starting entrepreneurs (Ouweland and Van Meijeren, 2006b). The development of the local economy of problem neighbourhoods lags behind the development of the urban and national economy (Ministerie van Economische Zaken, 2010; Planbureau voor de Leefomgeving, 2010). In problem neighbourhoods incomes are lower than elsewhere, more people rely on social benefits and the number of investments by entrepreneurs, developers and private investors is low. Young, often immigrant, people have difficulties to find internships and jobs, are insufficiently educated and have a shortage of sufficient qualifications. Therefore, investments in disadvantage residents and in the neighbourhood economy are necessary.

Urban and local economies are important factors in social-economic processes in neighbourhoods (McGregor and McConnachie, 1995; Boonstra, 2008). So, the economy can play an important role in urban regeneration. However, the economy, also the local one, is difficult to control. The economy is difficult to predict, which is, according to Ouweland en Van Meijeren (2006a), most probably the reason why the economy hasn't been a major theme in urban renewal during the last centuries. The result of physical renewal can be visible within a short period, while the effect of a policy aiming at the improvement of the neighbourhood economy is difficult to predict, and varies in each different context. In addition it is not very clear who is responsible for a policy on economy-based

urban renewal in neighbourhoods. The municipal government? Or the housing corporation, who could invest in and built appropriate businesses units? And what is the role of residents and local entrepreneurs in this?

This chapter focussed on the importance of the neighbourhood economy in urban renewal. The main question is: what can be the contribution of the local economy in urban regeneration? The focus in the second part of this chapter will lie on the relevance of creative businesses, as an example of small-scale local economic activity, in this context, as well as the link between the local and the urban economy. Furthermore, this chapter give examples of local initiatives and policies geared on residents, entrepreneurs and the local community in relation to local economic development. This chapter is concluded with a list of criteria that contribute to the development of local, preferably creative economic vitality, and so to urban regeneration.

5.1 The role of the economy in urban regeneration

Already in the 1990s the importance of the economy urban regeneration has been endorsed. In many problem neighbourhoods with a large concentration of disadvantaged residents, people are isolated from 'mainstream social and economic activities' (McGregor and McConnachie, 1995). This exclusion holds back the opportunity for these residents' "human development and pursuit of a decent lifestyle" (Gershuny, 1993 in: McGregor and McConnachie, 1995, p.1587-1588). According to McGregor and McConnachie the labour market is one of the key factors in reducing social exclusion and in stimulating urban regeneration of neighbourhoods. By labour income is generated, state benefits independency is reduced and standard of living is improved. The following list was made in 1995 and points out the aspects that lead towards high rates of unemployment in problem neighbourhoods. These factors individually or by combination influence the participation in the labour market negatively.

- » Shortage of local jobs;
- » poor transport access to employment opportunities in the wider urban labour market;
- » lack of a social network of employed people in the neighbourhood from whom information about employment opportunities can be obtained;
- » lack of educational qualifications and vocational skills among residents;
- » broader constraints in accessing the conven-

tional labour market such as costly or inadequate child care;

- » the attraction of migrant households, the homeless and other socially distressed groups into the most disadvantaged neighbourhoods;
- » lack of financial incentive to reintegrate with the labour market because of the impact of welfare payments;
- » stigmatisation by employers of residents of disadvantaged areas due to the negative image many of these localities have acquired through time and
- » the development of cultures of poverty or lower classes which generate negative attitudes towards education, training and employment. (McGregor and McConnachie, 1995, p.1588)

Today, these issues are still a major factor in successful employment of people in cities, based on the issues addressed in chapters 2 and 3. Improving these conditions contributes to social and economic reintegration of residents and thereby contributes to the regeneration of problems neighbourhoods. McGregor and McConnachie provide a strategy towards social-economic reintegration through urban regeneration, which distinguishes different approaches that should be executed simultaneously: "(1) creating employment opportunities within disadvantage neighbourhoods and (2) building links between excluded neighbourhoods and the wider labour market" (1995, p.1589). Both approaches have a direct link with the neighbourhood economy. The first is directed towards local economic development and the creation of self-esteem, new perspectives and local job opportunities, and on the creation of lively and liveable neighbourhoods; the second towards creating job opportunities on the wider labour market by local education, training and internships, and other local initiatives.

Labour participation is positively influenced by the availability of jobs (high employment density), low unemployment rates, and high wages and high levels of education (Van Dijk and Schutjens, 2007). These factors play a role in the scale of the neighbourhood and on the scale of the city.

Local employment opportunities

Local economic vitality and entrepreneurship can have a spin-off on the self-esteem of residents and stimulate the eagerness and willingness of communities and individuals to help themselves and participate in society (McGregor and McConnachie, 1995). Low self-esteem is one of the major consequences of economic and social exclusion, and is

one of the greatest barriers to economic reintegration, according to McGregor and McConnachie. Not only the self-image of residents is important in this matter, but also the image outsiders have on an area is of importance. Education and training are essential in solving social-economic problems. In a strategy of creating local employment opportunities important results are the mixed and diversified living environment that is created this way, forming a place for people and liveliness (Jacobs, 1961). This again has a positive influence on the further development of the local economy and the increase of local jobs. But there are also downsides to this strategy. Creating local employment opportunities as a single mean is insufficient in order to contribute to social-economic urban regeneration, because not all jobs vacancies will be filled up by locals, and of course the number of local jobs will not be sufficient to employ all residents. In addition the poor environmental quality of problem neighbourhood could hamper start-ups and the development of local businesses. That is, why a second complementary approach is needed to successfully achieve social-economic reintegration. This approach is directed at making the connection between the inhabitants of problem neighbourhoods and the wider urban or regional labour market.

Link with the urban labour market

According to McGregor and McConnachie (1995) the link between the isolated, excluded and disadvantaged residents of problem neighbourhoods and the wider urban labour market needs to be improved in order to create successes in urban regeneration. The second approach creates a larger and wider range of job opportunities in comparison with the latter approach. Secondly, it strengthens the job structure and reduces employment risks and finally breaks down the social-economic exclusion of deprived areas in an urban and regional context. An important tactic in this approach is the involvement of local entrepreneurs in education and training of youth and other residents through 'education-business partnerships'. Additional tactics are involvement of parents, providing one-on-one support in home-school support schemes, qualitative vocational guidance for early school-dropouts, counselling for long-unemployed, personal development programs, development of an intermediate labour market (traineeships), and reducing constraints such as expensive or unavailable child day care. These all contribute to an improved participation of residents in problem neighbourhoods in the local and urban economy and society.

An example of the development of education-business partnerships is provided in the context of Rotterdam-Zuid itself; it is a private initiative of local entrepreneurs converged in 'IkZitopZuid' (IZoZ), and is called 'LeerWerkLijn Zuid' (Ik Zit op Zuid, 2011). This initiative stimulates the involvement of local entrepreneurs as well as schools and other knowledge institutions such as TU Delft and Erasmus University in the social-economic development of youth and other residents. It aims are: the development of 'soft skills' among the population, the improvement of the image of technical craftsmanship, market-oriented education and training aimed at practical skill-development, and on an economic incentives policy. The program of LeerWerkLijn Zuid is based on three goals and three means: (1) motivation and inspiration of talented youth in local workshops; (2) qualification of youth in traineeships; and (3) specialisation, and the education and training of skilled workers on campus, especially in 'midtech' (i.e. industries, maritime technology and construction). Businesses specialised in midtech form the link between craftsmanship and skilful talent, and innovative technologies such as 'cleantech' (Ik Zit op Zuid, 2011). These three components take place of three different scales, namely the neighbourhood, the district and the city.

The first goal, motivation and inspiration, takes place on the level of the neighbourhood in local workshops called 'BIVAK' (binnenstedelijke vakwerkplaats) that have ties with local companies and schools. Companies provide training and coaching and facilitate space, services and material; schools provide information and guidance. They provide orientation on craftsmanship in a broad sense. Examples of such as workshop are Vakwerf Feijenoord, a place for creative and technical production, craftsmanship and education, and Helderheidsplein, a podium for creative and artistic talent. The second type provides traineeships and education, and takes place in a so-called 'LeerWerkPark'. Businesses, located in the environs of this LeerWerkPark provide input for the curriculum, internships, educational tools, training. Schools (VMBO and MBO) provide education towards a basis qualification. The focus lies more on specialisation (e.g. technique, health care, trade, entrepreneurship) than on orientation. Exemplary projects are Hart van Zuid/Motorstraatgebied (specialised in commerce, trade and entrepreneurship), MCRZ/Maastad hospital, and 'Bouwen aan Zuid', which combines the efforts of buildings companies, housing corporations, schools and new

talent in order to improve the impoverished housing stock of Rotterdam-Zuid.

The third and final stage in the development of skills and talent is specialisation on campuses; this type is consequently named 'Campus'. Here people are educated for specific jobs generating high-skilled, specialised professionals. Companies involved do not only provide support and job opportunities, but also help themselves because campuses are also a place for innovation and entrepreneurship. The Campus is formed by a cluster of businesses and knowledge institutions, an example of such as cluster in the RDM Campus.

Regarding these two approaches some general notes have to be placed. Proper planning and phasing are essential; social-economic regeneration in problem neighbourhoods is a long-term process (McGregor and McConnachie, 1999; Ouwehand and Van Meijeren, 2006a). Direct execution of these measures is important, but their effects will take time. Also McGregor and McConnachie say, that physical reconstruction as a mean of urban renewal can be conceived quickly, but the effects on the long-term, the improvement of social-economic conditions and social mobility, are limited. While investments in education and training, without a clear focus on the labour market can result in the (selective) migration of well-educated residents. Therefore the involvement of local businesses, as well as other private parties and residents, is essential in achieving successful social-economic reintegration. Finally the two researchers also add the importance of an urban regeneration program, which combines urban and local strategies on economic development, because (1) problem neighbourhoods weaken the economic development and the image of a city, and (2) city-wide development is needed in order to start a successful regeneration process.

The success of this strategy, especially in the context of offering city-wide employment opportunities and the involvement of businesses located beyond neighbourhood borders, also depends on the physical connection between problem neighbourhoods and the wider urban or regional economy. A well-developed and well-functioning public transport network is essential. Problem neighbourhoods require a good connection to the urban, regional and (inter)national network (McGregor and McConnachie, 1999; Rogerson, 1999). This can be concluded from the fact that in urban problem neighbourhoods the car ownerships is relatively low and so residents are dependent on other means of transport in order to participate in the urban

economy, or they are bound to local employment opportunities. In 2012 inhabitants of the Netherlands own on average one car per household, in Rotterdam the average number of car per household is 0.7, while in Bloemhof, Hillesluis, Afrikaanderwijk and Feijenoord the number is 0.5 (CBS, s.d.). So not only the availability of jobs, but also the physical accessibility of jobs, as well as of education and training, inside and outside the neighbourhood is of great importance in urban regeneration.

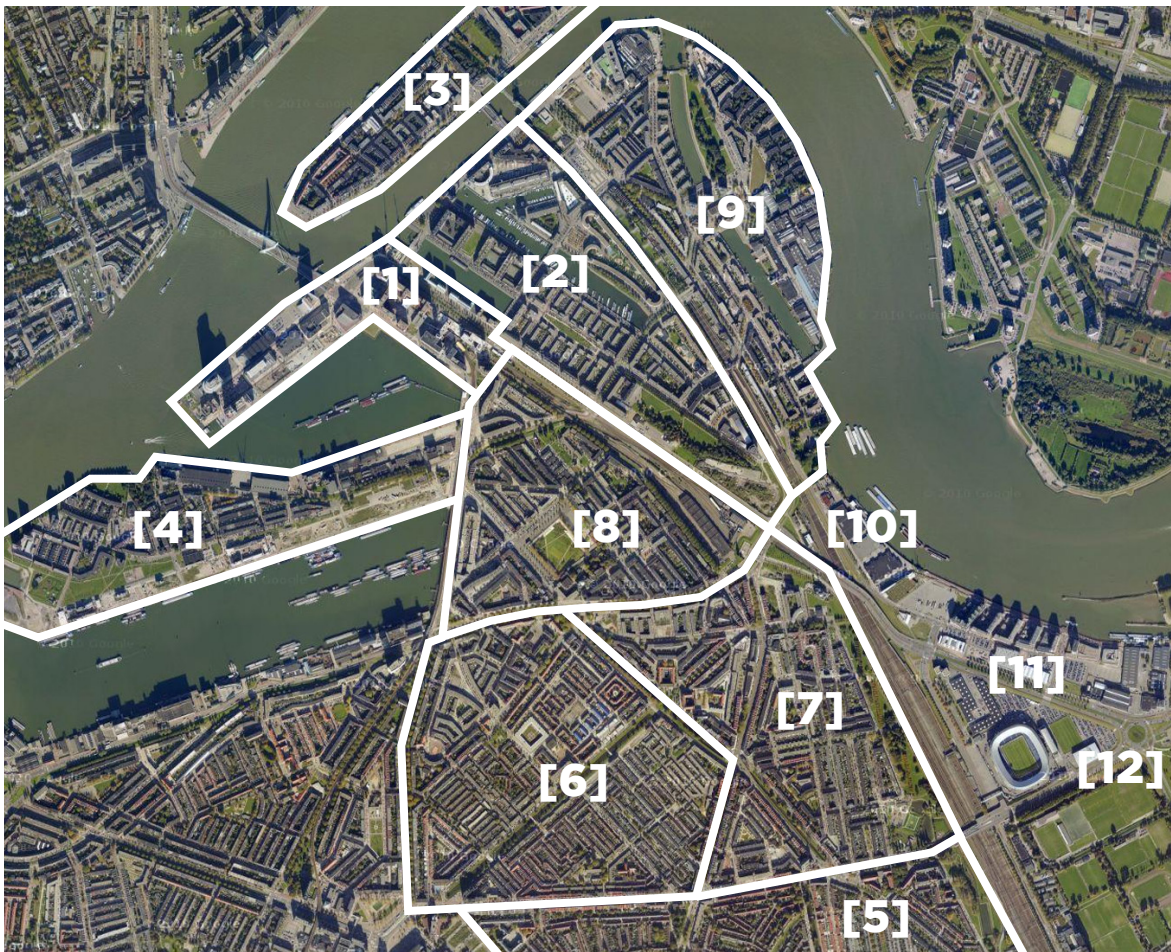
5.2 Defining the neighbourhood economy

Individual residents and small-scale local entrepreneurs increasingly are becoming partners in the development of neighbourhoods (Boonstra, 2008). Local economies, aside from the urban, regional and international economies, have a large impact on social-economic development in problem neighbourhoods. But what is the neighbourhood economy actually?

The neighbourhood economy is formed by and mainly thrives on small-scale businesses such as retail, commercial services, catering, entertainment, leisure and other services, which are often run by local individuals. According to Boonstra small-scale entrepreneurship bring quality and liveliness to neighbourhoods and can be an instrument in urban regeneration. A wide range of factors influences local economic dynamics and the success of the neighbourhood economy: urban form and layout, social, demographic and economic factors, accessibility and routing, and buildings density. Further on in this chapter these factors will be described in detail.

What is a neighbourhood?

There is no general definition of a neighbourhood. In Dutch context often a difference is made between *wijk* and *buurt*. Often these two notions are used synonymous, but in overall *wijk* is a larger entity than a *buurt*. Neighbourhoods can be conceived as a unity of conception or 'community', as a physical entity, as a social-cultural entity, as an administrative or statistic entity, or as an abstraction of reality. These different conceptions are formed by the varying scopes and world-views of scientists (sociologist, geographer, town planner, etc.) (Van der Meer, 1996). In this thesis the definition of a neighbourhood is defined by the administrative entity created by the municipality. This thesis is dealing with neighbourhoods located in the borough (*deelgemeente*) Feijenoord. This dis-



[5.1] map showing all neighbourhoods of Feijenoord:
 1. Kop van Zuid
 2. Kop van Zuid-Entrepot
 3. Noorderiland
 4. Katendrecht
 5. Vreewijk
 6. Bloemhof
 7. Hillesluis
 8. Afrikaanderwijk
 9. Feijenoord
 and the areas of:
 10. Maaszicht
 11. Stadionweg (De Veranda)
 12. Stadionpark-De Kuip

trict consists out of nine neighbourhoods [5.1]: Kop van Zuid, Kop van Zuid-Entrepot, Noorderiland, Katendrecht, Vreewijk, Bloemhof, Hillesluis, Afrikaanderwijk and Feijenoord. The last four neighbourhoods are the problem areas on which the strategy and urban design, this thesis should produce, are directed. The project is also related to the neighbourhoods of Oud-IJsselmonde and Groot-IJsselmonde, where the areas of Maaszicht, Stadionweg (De Veranda), and respectively Stadionpark and De Kuip are located.

What is the role of the neighbourhood?

Neighbourhoods have certain functions. They are a place for living, working, learning, recreation and entertainment. The social, economic and physical quality of a neighbourhood determines the success of these functions (Van der Meer, 1996). Four types of functions can be defined. First, the neighbourhood is an entity in which social and physical integration of people take place through social contact, networks and activity patterns, such as daily shopping. Contacts and network in the neighbourhood have a major contribution to the well-being and social-economic development of people. Local networks contribute to job-finding, child day care and education. The neighbourhood

also offers important spatial-physical conditions for personal development by pleasant and safe pedestrian routes, playgrounds and parks, which also contribute to social contact.

Secondly, a neighbourhood is also a place for consumption of services and products. Most neighbourhoods have shops, schools, neighbourhood centres, and other social and commercial services. These amenities do not only provide in daily needs, but are also social and economic services that provide to face-to-face contact and social relationships.

These days, cities also focus on the function of neighbourhoods as a showcase of a certain lifestyle or identity. Cities often try to attract artists and other creative people to urban renewal areas, as local governments understand that they contribute to the liveliness and economic activity in neighbourhoods (Van der Meer, 1996).

Finally, neighbourhoods provide also a specific physical environment where living, working, learning, recreation and entertainment are accommodated.

What is a neighbourhood economy?

There is no fixed definition of the neighbourhood economy. According to Ouwehand and Van Mei-

jerren (2006a), the definition of neighbourhood economy is formed by the contemporary social context, and is therefore interpreted differently by scientists and policy makers, as a result of different world views and different social, economic, spatial, political and historic contexts. Ouwehand and Van Meijeren use the following definition (this definition will be used in this thesis as well): the neighbourhood economy contains “all initiatives aimed at strengthening the economic position in a certain neighbourhood or all initiatives aimed at the realisation or development of economic functions in a certain neighbourhood” (2006a, p.14). Prior to this in 2005, a definition was formed which included the role of the neighbourhood economy in urban regeneration. “Initiatives aimed at strengthening the economic profile and basis of neighbourhood and small centres, where these neighbourhoods and centres deal with a relative social and/or economic deprivation (of residents red.), and where these neighbourhoods and centres have a dominant residential function.” (Ter Beek *et al.*, 2005, p.10) But according to Ouwehand en Van Meijeren investments in the social-economic development in neighbourhoods are not only practised through initiatives aimed at individuals, but also through projects aimed at the neighbourhood as a whole, which are often linked to the improved of local amenities. These two different approaches are explained in the next paragraph.

5.3 The role of the neighbourhood economy

During the 1990s and early 2000s, policies on urban regeneration focussed mainly on the urban or regional economy, instead of on the local economy, and on local physical renewal. This view changed during the mid-2000s. Following the release of the report ‘*Stad en stijging*’ in 2006, research on the neighbourhood economy gained interest of scientists, housing corporations and policy makers. Projects on the promotion of neighbourhoods, development of new local economic initiatives, strengthening of existing businesses, and the enlargement of self-confidence and self-awareness of residents in deprived neighbourhoods were started in this period (Ouwehand and Van Meijeren, 2006c). In other urban renewal projects the main question was ‘what is wrong in these problem neighbourhoods?’, while since 2006 the life, welfare and social-economic development of residents has become the central theme (Ouwehand and Van Meijeren, 2006a).

A matter of scale

The major question when discussing the relevance of the neighbourhood economy in urban regeneration is: when is the neighbourhood a relevant entity in dealing with urban regeneration based on social-economic development? According to Ouwehand en Van Meijeren (2006a) six different notions should be taken in to account when discussing the role of the local economy in urban regeneration.

First, it is obvious that urban economic growth does not contribute to social-economic development among all residents. Numbers on unemployment, income and education show that there are differences within cities and between cities and surrounding towns, and that these differences do not disappear. So there are reasons to focus on the neighbourhood in social-economic development. Secondly, the neighbourhood itself is not the prime cause of a lack of social-economic development among residents. It is the lack of capacities that influences their development. But there is an indirect link between the neighbourhood and social-economic development, as language deficiency and certain cultural orientation are influenced locally (Van der Laan Bouma-Doff, 2005 in: Ouwehand en Van Meijeren, 2006a).

Third, the neighbourhood does not and will never function as an economic entity on its own, it is part of a larger urban network that offers “a variety of living environments, jobs, possibilities for education and training, and of amenities for culture, recreation, service and health care” (Reijndorp, 2003 in: Ouwehand en Van Meijeren, 2006a).

The fourth notion states that offer and demand on the labour market should be related, and that this balance is influence by the short-term economic situation. Currently there is a demand for highly educated professionals and specialised skilled workers, especially in the technology and medical sector, while there is a surplus of low-qualified job-seekers. Investments in education, training and skills are needed, but results will not be visible immediately.

Fifth, the labour market is organised not on the local level, but on the regional, national and international level. This counts for both high-skilled and low-skilled labour, for example horticulture and construction.

The final notion states that investments in education, training and skills should be linked to the labour demand. Offer and demand are often not linked to each other, resulting in wrong-qualified people, and unemployment or the need for occupational resettlement. Offering labour that is di-

	PHYSICAL MEASURES	NON-PHYSICAL MEASURES
NEIGHBOURHOOD PROJECTS	<ul style="list-style-type: none"> • construction and renovation of stores • realisation of live-work units • temporary re-use of buildings • construction of glass fibre network • realisation of small business spaces • construction of water gardens • construction of a multi-functional centres • clean out of property of undesirable functions/reduction of nuisance • realisation of business incubators 	<ul style="list-style-type: none"> • advice for start-ups and established entrepreneurs • incentive policies (i.e. subsidies and kansenzones) • policies on business closures • image improvement through counseling and information
INDIVIDUAL PROJECTS	<ul style="list-style-type: none"> • construction of a multi-functional centres • construction/improvement of routes, parks, playgrounds, water gardens (aimed at the improvement of contact between local residents and visitors) • realisation of business incubators 	<ul style="list-style-type: none"> • internships/trainee posts for youth guidance and counseling for (start-up) entrepreneurs • personal development projects aimed at (re) entry into the labour market • 'ABCD-trajectories' (economic, cultural and social development) • incentive policies (subsidies on cheap housing, scholarships)

[5.2] examples of measures of neighbourhood and individual projects (Ouweland and Van Meijeren, 2006a)

rectly linked to demand, creates job opportunities, and stimulates economic development.

Concluding, initiatives on the local level can contribute to social-economic regeneration of problem neighbourhoods. But the link with the urban, regional and national context is crucial.

Two types of projects: individual and neighbourhood

Social scientists make a distinction between two different types of projects, in which the neighbourhood economy is the core of the approach that should lead to the improvement of the social-economic conditions in problem neighbourhoods: projects meant for the area (*gebiedsgerichte projecten*) and projects meant for the individual (*persoon-sgerichte projecten*) (Ouweland and Van Meijeren, 2006a) [5.2]. The first type is aimed at the promotion of local entrepreneurship and the growth of business activity in the neighbourhood. These projects should for example revitalise local commercial areas such as shopping streets, offer residents the opportunity to start their own businesses by the realisation of live-work spaces, improve the attractiveness and liveability of neighbourhoods by investing in local amenities, or just create local employment.

The second type is aimed at the improvement of employment opportunities of residents. Exemplary is the establishment of educational facilities and internship programs in close collaboration with local entrepreneurs and other private or public parties, or the construction of multifunctional neighbourhood centres with libraries and meeting spaces, for workshops and training. Also the creation of pleasant and safe slow-traffic routes

throughout the neighbourhood can contribute to the social-economic development of residents, although the effects are less evident. Essential in this case is to create places where people can meet each other and exchange thoughts, experiences and knowledge. Social contact is crucial.

So, these two types aim at two different domains: (1) the neighbourhood as a geographical domain where economic activity is stimulated or remained, and (2) the neighbourhood as a community or collective of residents that need above average support to enhance (improve or enlarge) their employment opportunities, or as an area which can through a specific layout of design contribute to the development of its residents and thus to social and economic mobility (Ouweland and Van Meijeren, 2006a).

Ouweland and Van Meijeren provide a wide range of physical and non-physical measures aiming at a wide range of goals, which should eventually contribute to social-economic development among residents and the regeneration of neighbourhoods. In their research the measures are the central theme in the discussion of different exemplary projects, not the aim. This is so, because many projects have a wide range of aims, but the measures that shape these projects are well-defined. Some projects contain physical and non-physical measures, while others focus on both domains: the neighbourhood and the individual. An example is the realisation of business incubators. Business incubators are often created to increase the liveliness and economic activity in neighbourhoods, but are also a measure to offer people the possibility to shape their (entrepreneurial) live and to develop themselves. In para-

graph 5.6 some of these measures, the ones that are relevant in this specific thesis and urban design project, will be explained further and examples of realised projects are given.

Liveability in neighbourhoods

The neighbourhood economy can have an important contribution in social-economic regeneration of deprived urban areas. But the development of economic activity and the attraction of businesses have also other consequences, and certain local factors have to be taken into account when business development is planned in neighbourhoods. According to recent research economic activity in neighbourhoods does not necessarily lead to the improvement of liveability (Planbureau voor de Leefomgeving, 2010). The definition of liveability is formed by three, interrelated primary factors: physical aspects, social interaction, and safety and nuisance. Examples of liveability problems that influence the success of local economic development are: nuisance, physical degradation, theft, violence, burglary in business property, lack of occupancy of business property and the share of unemployed persons among the local population. Again, liveability problems are in general a different type of problems, that the ones on which this strategy is aiming, namely social-economic problems. But liveability problems cannot be denied; the success of this strategy, does partially rely on the improvement of liveability in neighbourhoods.

According to the research, the development of economic activity in urban neighbourhoods, especially in problem neighbourhoods, is limited, and in some cases the number of businesses has even decreased. This is in spite of recent policies and efforts in stimulation of the local economy. But, there is also proof that the improvement of liveability in neighbourhood increases the chance of survival and growth of local enterprises. Liveable neighbourhoods are able to retain businesses. On the other hand, influence of liveability problems on business start-ups is limited. Urban neighbourhoods are known to be the nursing ground of new entrepreneurs, and are a good location for small-scale economic activity. More important for start-up companies and small local businesses are local demographics (age structure and level of education). Liveability does become an issue, when small business need to survive, or when they grow and tend to move (Planbureau voor de Leefomgeving, 2010). The success of businesses largely depends on the characteristics of the companies themselves, as well as on the urban and regional conditions; important factors are the labour market, business

networks and accessibility.

In this report also the influence of the neighbourhood economy on local liveability has been researched. In some cases the increase of economic activity in neighbourhoods amplifies liveability problems such as un-safety and nuisance, also in neighbourhoods with a business profile that is confined to restaurant, cafés and retail. But, small shops and other local consumer services generally have a positive influence on the liveability in neighbourhoods, especially when entrepreneurs show clear bonding with the neighbourhood, such as ethnic retailers. The fact that they have a largely local clientele increases the likelihood of social encounters and thus social cohesion. Policymakers and planners have to be aware, that personal benefits, local bonding and the personal character of the entrepreneurs determine the efforts and initiatives taken by them; and not local economic interests.

Stimulating local economic activity, and so the creation of a larger local job market, does not necessarily lead to less unemployment within the neighbourhood. The probability that newly created jobs are linked to the capacities of residents is rather limited. Unemployment through the creation of jobs should be tackled on the scale of the city or through the creation of overall labour and entrepreneurship potential. Increased employment does influence local liveability in a positive way, but does not mean that people should be employed within the neighbourhood.

Last but not least, the lack of occupancy of business property has a negative influence on liveability and local economic growth through business development. Vacancy can encourage vandalism, and vacancy can cause other entrepreneurs to leave the neighbourhood, as reduced liveability decreases the chance of survival and growth among businesses. On the other hand, the research also concludes, that in neighbourhoods with a high density of services and other businesses, the number of business start-ups and the desire to stay as growing entrepreneurs are high.

So, in order to maintain neighbourhood businesses and boost local entrepreneurship, investments in the liveability in problem neighbourhoods are necessary. Especially the bad image of problem neighbourhoods hampers local business development. Other than that, also developments on the scale of the city (i.e. labour market, accessibility, business networks) and general policies such as business support and assistance in job market orientation contribute to the economic success of neighbour-

hoods (Planbureau voor Leefomgeving, 2010).

Three types of local entrepreneurs

In 'De economische kracht van de stad' Bulterman *et al.* (2007) distinguish three different types of local entrepreneurs: starters, neighbourhood entrepreneurs and successful growing entrepreneurs. Many entrepreneurs start their company within their own neighbourhood, at home or elsewhere in the neighbourhood. The starting, often young, entrepreneur is mostly specialised in commercial services and does not have specific demands concerning the location of their business. But they do value the quality of the living environment, the image of the area, the street scene, and safety, this probably coheres with the fact that they live and work in the same location. The business networks of start-ups often extends outside the neighbourhood.

The second type is the neighbourhood entrepreneur with a local serving function. Examples are shop-owners, hairdressers and caterers. They often live in the neighbourhood itself and are active for a longer period. They are oriented on the local market, and are often known within the neighbourhood and have a local clientele. The local business climate is very important; especially the quality of business real estate and the direct environment are important location factors.

The third group of local entrepreneurs is formed by successful, growing entrepreneurs who act beyond the neighbourhood. Their markets and business networks are located outside the neighbourhood. Important location factors are the availability of space, good accessibility, and a representative business property and environment. When there is a lack of this type of location or when certain location demands are insufficiently satisfied, entrepreneurs will leave the neighbourhood and settle elsewhere (Bulterman *et al.*, 2007; Planbureau voor Leefomgeving, 2010). The authors relate three types of neighbourhood economies to these groups: 'incubator economy', 'counter economy', and 'stepping stone economy'.

According to Volkskrant Magazine of June 22, 2013, an interesting type of small-scale entrepreneurship is developing in cities, especially in neighbourhoods with a certain 'creative atmosphere'. A new category of shops appeared about three years ago in Belgium called concept store (Molenaar, 2013 in: Wittebrood, 2013). The concept store is a shop with a mix between services and products, such as a combination between a hairdresser, launderette and a bar (e.g. Wasbar in



[5.3] Wasbar in Gent ('t Brakelt, 2013)
[5.4] Lola Bikes & Coffee in The Hague (The Coffee Vine, 2013)



Gent), or a bicycle shop and repairer and a coffee lounge (e.g. Lola Bikes & Coffee in The Hague). According to Molenaar the old branch model of the retail sector does not function any more, as a result of the revolution in web shops. These mixed stores are more able to attract customers. They provide an experience and a unique mix and diversity of services and products.

A fourth group that can be defined is the small *zelfstandig ondernemer zonder personeel* ('zzp'er') or freelancer (Folkeringa *et al.*, 2012). Many start-ups begin as *zzp'er*, and as their businesses grow, they start taking on personnel. But others keep on doing their jobs as self-employed entrepreneur without taking on additional personnel. *Zzp'ers* often work at home, or from an office in a shared business location (e.g. business incubators). *Zzp'ers* are often bound to the neighbourhood where they live and work; they make use of local services such as shops and schools, and are often meet clients and colleagues in local public spaces such as cafés, restaurants and other meeting places, so called 'third spaces'. Also business incubators can be classified as third space, as they are quite different from traditional work spaces or 'second spaces'; homes are classified as 'first space' (Florida, 2005).

So, the difference between *zzp'ers* and other entrepreneurs is their relative invisibility, which is in strong contrast with the visibility of for example shops and service offices. Yet, recently the visibility of *zzp'ers* especially among the 'creatives' is increasing, as these freelancers become more and more part of the public domain, as they appear in coffee bars and other public places (Poppegaai and Kloosterman, 2010). Consequently they prefer to live in areas where they can easily meet kindred spirits (Franke en Verhagen, 2005).

Immigrant entrepreneurs

In many problem neighbourhoods, there is a high percentage of residents from foreign descent. The biggest foreign communities in Dutch cities are formed by people from Turkish, Moroccan and Surinamese origin. According to Kloosterman and Van der Leun (1999), cities should focus their part of efforts in stimulating local entrepreneurship, especially on the immigrant population, but also on upmarket mobility of immigrant entrepreneurs so that they can establish successful, growing businesses. Their enterprises can often be placed in the group of neighbourhood entrepreneurs, and in the group of start-ups. Among the Chinese population in the Netherlands, there are many entrepreneurs, 14.8% of the Chinese is self-employed (Dagevos and Gesthuizen, 2005). Also people from Turk-

ish (6.0%) and Iranian (5.5%) descent appear to have an enterprising spirit. Rapid growth in entrepreneurship is visible among the Moroccan community, as well as among Afghans and Iraqis. Entrepreneurship among the Antillean community is limited.

Foreign entrepreneurs are active in different economic branches, and are mostly active in branches other than native Dutch entrepreneurs. Compared to native entrepreneurs, immigrant entrepreneurs are very present in the catering branch; while their shares are limited in construction and commercial services. The share of immigrants and natives in the retail are more or less equal. Surinamese and Antillean people are more active in the commercial services and other service branches, and less in the catering and retail branch. Moroccans and Turks are well-represented in retail, but also in the catering and commercial services branches. More than half of the Afghan entrepreneurs are specialised in retail; also among Iraqis and Iranians there are many retailers. Iranians are also very active in wholesale and commercial services. And three quarters of the Chinese entrepreneurs is self-employed in the catering branch. Between 1994 and 2004 the biggest growth among immigrant entrepreneurs was in the commercial services sector (Dagevos and Gesthuizen, 2005). The question that remains is if the new generation of ethnic youth, also has the entrepreneurial spirit of their parents and grandparents (Kloosterman and Van der Leun, 1999).

Overall, in 2004 most immigrant entrepreneurs were active in the retail (17%) and catering sector (25%), most probably because in these sectors lack of capital or education are not impediments to entrepreneurship (Dagevos and Gesthuizen, 2005). Immigrants are underrepresented in the higher levels of the labour market (Kloosterman and Van der Leun, 1999).

Like for most small-scale business, for immigrants entrepreneurs spatial concentration offers both demand and supply advantages. A critical mass of customers is often found in the neighbourhood itself, as these entrepreneurs mostly offer specific ethnic products and traditional services. Another aspect related to demand is the influence of local networks on trust-building, thus on the creation of a more permanent economic basis in the neighbourhood. On the supply-side close-knit local networks and physical proximity can help to keep business transaction costs down, can offer ways of obtaining (starting) capital outside the usual channels, and it offers cheap and accessible sources of information in finding business opportunities

and seeking staff (Kloosterman and Van der Leun, 1999). Immigrant businesses are also an important in creation of networks than contribute to social participation or obtaining a job.

5.4 The role of the creative industry

“Today’s economy is fundamentally a creative economy.” (Florida, 2002, p.44) Creative city policy, creative class and creative industries are becoming increasingly important in the efforts of cities to gain a competitive economic position in the world (Marlet and Woerkens, 2004; Franke and Verhagen, 2005; Verschoor *et al.*, 2009). Richard Florida was one of the first to be convinced of the importance of human creativity as the new motor for economic development, especially for the development the service economy (Florida, 2002; Van Aalst *et al.*, 2006). Since the last few decades, economic prosperity depends on the development of human capital, and not on technological development, high-quality business locations or improved means and processes of production. According to Florida advanced economies are shifting towards a knowledge-based economy, but he adds that that creativity is an important factor in the success of this type of economy. Creativity is key driver of economies, as it allows knowledge to transfer into useful new forms. According to Florida, scientific and artistic practices have become industries themselves during the last century and the number of people working in creative occupation is growing rapidly. “The joint expansion of technological innovation and creative-content work has increasingly become the motor force of economic growth.” (Florida, 2002, p.44) Added value to products is created by human capacities, consumers pay for the personal efforts and creativity that is put into products and services. The creative industry is often not only regarded as a potential motor for urban economic growth, but also for urban regeneration (Montgomery, 2007; Pratt, 2008).

According to Florida, every person is creative, thus human creativity is the point of departure of his theories. Human creativity is exploited at its best in an ‘inclusive creative society’, thus a pro-active and open society (Florida, 2002). According to Florida the creative class concentrates in cities, so this is also the location of contemporary economic development. But Florida, was not the first to acknowledge the importance of cities in economic growth.

Jane Jacobs was one of the first to attribute overall economic growth to cities. According to her writings in ‘The death and life of great American cit-

ies’ (1961), urban policies should aim at the creation of compact cities where living, working and recreation all happen within the neighbourhood. She resents Modernism and its strict separation of functions, as well as the Garden City ideas, which support suburbanisation.

In addition to the economic profits, it is also assumed that creative industries improve the image of a city (Verschoor *et al.*, 2009). Moreover, creative industries improve the attractiveness of cities towards private investors. Many Dutch cities have adopted a creative profile in order to create a distinctive image, said Verschoor.

A strong creative industry does not only benefit the city as a whole, but also the problematic – and the not so problematic – neighbourhoods as well as their residents. According to Saris (2008) creative industries contribute to the diversity, liveliness, multi-functionality in neighbourhoods. Creative industries can also help overcoming social class division and ‘tap human creativity’, also out of social-economic disadvantaged residents (Florida, 2002).

A well-known Dutch type of place where creative industries are settling is the creative business incubator or *broedplaats* (Verschoor *et al.*, 2009). Creative industries have proven to be quite foot-loose; therefore a place for development of creative industries has to be created by city governments (Teeffelen, 2005). According to Teeffelen strategies on gentrification of neighbourhoods, development of former industrial sites, the education of poorly educated youth and the attraction of enterprising student should be included in their planning policy on creative industries and business incubators. These strategies can contribute to the regeneration of neighbourhoods. According to Verschoor *et al.* (2009) creative industries and creative business incubators have a positive and regenerative, catalytic effect on problem neighbourhoods. Creativity has a positive effect on the social climate in neighbourhoods and creative business industries have a cultural, social, economic and physical effect on their environment, this is so on the condition that program and users are geared to regeneration objectives. Creative incubators and creative clusters owe their success to a mix of professionals and starters, the interaction between different creative disciplines and the corresponding innovative power. So, in order to create an effective contribution to urban regeneration, planning and designing creative industries should meet certain conditions. These conditions will be listed further on in this chapter.

Richard Florida's creative class

In his first book 'The rise of the creative class' Florida describes the rise of a new urban class in the United States, that focuses its attention in work and leisure on creativity. He names this class the 'creative class'. Economic development that the creative class brings, is based on three conceptions: technology, talent and tolerance. These 'three T's of economic development' are the prime conditions to economic growth in the world of today, and form the so-called creativity index (Florida, 2010). Tolerance (and openness) relates to the 'quality of place', combining certain place qualities that create an attractive environment for consumption and production by the creative class [5.5]. Another example of the value of tolerance and openness for quality of place is importance of external contacts and immigrants that bring in new ideas, skills and talents (Landry, 2000), and of social and business networks that play a role in knowledge spill-over (Boschma, 2004). Tolerance leads to the attraction of talent. Talent is formed by the creative class itself as the human capital on which, according to Florida, economic growth is based. The central statement of Florida ends with the development of technology as a result of the availability of talent. In 2005, he published the book 'The flight of the creative class', in which he described the growth (flight) of the creative class, but also the literal flight of this class from the United States to other countries such as Canada and Australia as a result of decreased tolerance and diversity. The creative class is known for its mobility, and are willingly to move in order to find their desired social, cultural and economic opportunities (Florida, 2005; Boschma, 2005).

Creatives are not only looking for a challenging job, but also for a tolerant and lively living environment. The creative class combines a calvinistic work ethic (working hard) with a hedonistic lifestyle (enjoy life) (Marlet and Woerkens, 2004).

That is why the creative class does not only look for a place to work, but also for a place that meets their demands. According to Florida (2005), cities with a historic character, a university, a large variety of cultural and culinary amenities, and sufficient the accessibility (by foot or by bicycle) of nature, sports facilities and recreation, attract a large creative class. The research by Marlet and Woerkens (2004) shows, that there is a significant positive correlation between attractiveness of a city as a place of residence, and the size of the creative class in that city.

Cities, especially the large and successful ones, are the place where an economic but also social and cultural shift is taking place. According to Florida (2002), the rise of the creative class will without doubt increase social inequality and uneven spread of wealth. The highest concentration of creatives, and so of wealth will be found in cities. But not all cities and regions will be successful in obtaining a strong creative class that boosts economic development. Cities should increase their efforts in finding the 'soul of the city'. The well-being of people is influenced by their personal relationships and their work, but also by their place of residence and by the community of which they are part. If they cannot find the beauty, diversity and openness they are looking for, a creative basis for economic development cannot be created. The essence of finding the right solution to the attraction of creatives, lies within the dynamics and characteristics of the city, these should be exploited in order to subtract local talent and attract new talent. According to Florida, the immigrant population and the diversity that they bring are impetus to the development of creativity and the development of new lifestyle concepts.

The creative class Richard Florida describes in his books, contains many different people from many different economic sectors, who are not all highly educated. According to Florida (2002; 2005), the

[5.5] main elements of quality of place and indicators suggested by Florida and others (Trip, 2007)

QUALITY	INDICATOR
<ul style="list-style-type: none"> diversity specific amenities 	<ul style="list-style-type: none"> functional diversity, distinctive neighbourhoods, sufficient density individual sport facilities, recreation areas and restaurants per capita (semi-)public spaces for informal meeting ('third spaces')
<ul style="list-style-type: none"> liveliness; culture technology; innovativeness talent creativity; bohemia tolerance; openness aesthetics environment; sustainability 	<ul style="list-style-type: none"> cultural and musical events; live performance venues per capita patents per capita; relative percentage of high-tech output percentage of people with a bachelor's degree and above percentage of artistically creative people relative percentage of foreign-born people, idem gays architecture; parks; urban heritage natural environmental assets; environmental quality; reuse of older industrial sites
<ul style="list-style-type: none"> safety 	<ul style="list-style-type: none"> crime figures

creative class is formed by people with creative and innovative ideas, people who contribute to production and economic development primarily because of what they think instead of what they do. They are the ‘problem solvers’ of our economy. His creative class includes writers, fashion designer, graphic designers, musicians, stage actors, composers, painters, sculptors, photographers, dancers, directors and artists (‘bohemians’), but also IT-workers, mathematicians, architects, engineers, medics, social scientists and teachers. Even managers, salesmen, financial and commercial experts, lawyers, public servants and technicians are among to the creative class, according to Florida (2002). The creative class extends beyond the art and design sector, or ‘cultural industries’. Based on this characterisation, in 2002 the creative class in the Netherlands made up 47% of the employed labour population in the Netherlands (Van Aalst *et al.*, 2006). In the United States, the creative class would provide 27% of the labour population. Florida also deals with a more narrow definition of creative class, which excludes technicians; in this case the share of the creative class would be 29%, respectively 23%. Dutch social scientists, as well as the Dutch central bureau of statistics (CBS) and the Chamber of Commerce do not consider the creative class as a certain economic sector or entity (Marlet and Woerkens, 2004). Florida conceptions of the creative class do serve as a handle in defining the creative sector in the Netherlands, as this sector cannot be defined based on the (high) levels of education; many creatives are well-educated, but not all creative ideas, products and services are a result of extensive knowledge.

According to Florida the place where the creative class prefers to live, is also the place where businesses prefer to settle and where new enterprises are conceived (e.g. start-ups). As a result, the number of jobs increases in these environments. The popularity of Richard Florida among local policy-makers is a result of the supposed correlation between the presence of a creative class and the growth of employment. The question is, if this is actually true or not.

Florida’s theories cannot be in deployed in the Dutch context easily. In his works, the empirical evidence of his ideas on economic growth as a result of a large creative class is limited, and Florida’s ideas relate primarily to the US context (Marlet and Woerkens, 2004). Yet, evidence shows that in Dutch cities, there is a positive correlation between the shares of creative class among the population, their presence is often of significant influence on

the development of local employment (Marlet and Woerkens, 2004). On average cities with a high percentage of creatives have relatively more jobs, than cities with a low percentage of creatives. The same research also shows that the influence of the creative class on growth of employed is fairly large. The creative industry is a growing sector and is employing increased numbers of people in developed countries (Pratt, 2008). In comparison, the influence of the share of high-educated, high-qualified employees or high-income employees on the development of local employment is limited.

As our economies are currently declining, it is important to bring policy-makers to the table and discuss how to involve the creative class and creative industries in economic development strategies for cities (Pratt, 2008).

Creative industry in the Netherlands

It is the ambition to make the creative industry one of the strongest economic sectors, and to make the Netherlands the most creative economy of Europe by 2020 (Binnendijk, 2011). In eight of the nine Dutch top economic sectors, large companies play a major role. The exception in the creative industry as almost 90% of this sector is made up out of small and middle-sized businesses. The small scale is both strength and weakness of the creative industry (Frissen, 2011 in: Binnendijk, 2011). The creative industry is not bound to rigid structures, but is flexible and diverse and so able to act and innovate swiftly. This diversity is also a weakness as small and medium-sized enterprises (SME of *mkb*) and freelancers are hardly organised, ‘re-invent the wheel every time’, do not profit from the national knowledge infrastructure and are not aware of certain advantageous financial arrangements. According to Kranendonk (2011) there are many complex social issues concerning i.e. health care, food production, and the liveability of cities that ask for innovative and creative solutions (in Binnendijk, 2011). The limited size of creative enterprises makes it possible for them to take risks and act quickly, larger companies and institutions cannot. To achieve more success in the creative sector, and in order to built strong new links between the small creative entrepreneur and its clientele which is often made up out of larger companies and the (semi-)public sector, two measures have to be taken. The network of creative entrepreneurs and knowledge institutions needs to be strengthened, and the clout and visibility of the creative industry need to be improved. According to Frissen (2011) the creative industry is a sector which adds value to other top economic sectors and has an enormous

growth potential (in: Binnendijk, 2011).

The creative class in the Netherlands is based on the group of people, which serves as a model for creativity and innovation, and that create above-average economic value through this creative and innovative way of working. The creative class that is operated in the Dutch context is formed by scientists and researchers, innovative IT-workers, engineers, architects, TV-producers, journalists, bohemians, stage actors, musicians, writers, designers and all other cultural and artistic professionals. This creative class formed 19% of the population in 2002, while in cities this percentage was 22.2% (Marlet and Woerkens, 2004). A more common definition, used in the Netherlands, is creative industry.

In many cases also scientists and researchers are excluded. With the exclusion of these occupations, we can speak of the creative industry, which is often dissected into three subsectors: arts and culture, media and entertainment, and creative commercial services (Rutten and Koops, 2013). By this definition, in 2011 the creative industry provides 3.5% of the jobs in the Netherlands, namely 280,450 out of slightly over 8 million jobs in total. While the growth of employment has been limited during the last decade, the increase of creative jobs was substantial. In the period 2000-2011 overall employment grew with 0.9%, while in the creative industry the growth number was 3.0%. During most recent years employment growth was slightly less; between 2009 and 2011 the number of jobs decreased with 0.2%, while the number of jobs in the creative industry grew with 1.9% (Rutten and Koops, 2013). The largest growth in employment took place among performing arts, creative arts, music industry, film, and design.

During recent years, the number of business enterprises in the creative industry increased considerably, which indicates that especially the number of small enterprises and freelancers, has increased. The number of businesses in the creative industry increased with 8.2% in the period 2000-2011, while the number of businesses increased with 3.3% in general; between 2009 and 2011 these numbers were 10.3% and 3.6% respectively. The increase of jobs and businesses among the creative industry, as well as among other sectors does not directly translate into increased profits. As a result of the economic crisis, profits decreased between 2008 and 2010 both in the creative industry (-1.5%) and in general as well (-1.4%). But when we look at the last decade, we can see that especially among

arts and culture and creative commercial services, profits increased well beyond the profits of businesses in general. Between 2000 and 2011 profits in the arts and culture increased with 1.9%, media and entertainment with 0.3%, creative commercial services with 2.9%, creative industry overall with 1.3%, and the economy overall with 1.1% (Rutten and Koops, 2013).

When we look back at the central statement of Richard Florida concerning the 'three T's of economic development' and relate this statement to the situation in the Netherlands, research shows that there is not a clear correlation between tolerance, talent and technology, or rather between quality of place, creative class and economic development (Van Aalst *et al.*, 2006).

In the Netherlands there is a clear correlation between tolerance (with regard to free and creative activity) and openness (with regard to newcomers), and the spatial dispersal of the creative class (Van Aalst *et al.*, 2006). Urban regions showing high scores on these two levels have a relatively large creative class. This confirms the importance of a 'people's climate' over the presence of a good 'business climate', concerning the location preferences of the creative class, a factor that is also mentioned by Florida (2002). It has been proven that the creative class does not necessarily settle in areas that already show good rates of economic growth (Van Aalst *et al.*, 2006). Culture in the broadest sense of the world is what counts, not necessarily the presence of social-cultural services. The second part of Florida's statement that the presence of a creative class leads towards technological development has not been proven. Technological advancement does correlate with the level of education, but not with the percentage of creatives, nor with the level of urbanisation or the industrial structure. However, the research does show that the creative class does, although supplementary, contribute to the growth of employment. This influence is most present in regions where the economic structure shows a high variation of business activities, as in this type of environment new companies originate.

So, when the third 'T' of technology is replaced by new businesses, the statement of Florida is valid. According to Van Aalst *et al.* (2006) a creative city as a place for new creative talent and entrepreneurship flourishes at its best in a social climate of openness and collaboration. Policy-makers should have a broad understanding of the conception of incubator and culture, as a precondition for the development and growth of creative cities.

The economic position of creative entrepreneurs in the city

In the modern Dutch economy the creative entrepreneur has an important role to play (Florida, 2002; Marlet and Woerkens, 2004; Kloosterman, 2005; Binnendijk, 2011). On the scale of the urban, regional or international economy creative entrepreneurs provide services (e.g. ICT, consultancy, research) and products (e.g. media, design, arts), which are the result of the high flexibility and creativity of these entrepreneurs and of the creative and knowledge-intensive environment in which they are created. The strong relationship between the creative industry and other economic sectors and the fact that creativity is a relative uncertain business, results in a certain degree of clustering of creative entrepreneurs (Montgomery, 2005; Manshanden and Jonkhoff, 2005). The fact that companies purchase services and goods from creative entrepreneurs is a result of the high transaction costs that come with the production of 'creative' services and goods. These creative products come with a certain degree of uncertainty in respect to the need for a certain service of good. In case of uncertainty, companies will look for local suppliers, eventually resulting in concentration of creative entrepreneurship. This counts for all kinds of creative services, from low-profile creative production to high-quality services such as scientific research and technology design.

As said, the output of creativity-based services and products is often uncertain, therefore companies that produce them do not employ creative producers as they are not always needed. Consequentially, creatives are forced into entrepreneurship. This explains the large amount of small creative businesses. In many cases, the uncertainty of their production makes it impossible to hire employees and results in small-sized enterprises. Their small size results in economic uncertainty, limited continuity and financial vulnerability (Manshanden and Jonkhoff, 2005)

The market of creative enterprises extends beyond the local. But, creative industries also create supply and demand on a local level. Besides providing services and products for the wider market, they can also provide services and products for the local market. Think of entrepreneurs that locally sell fashion or other designer products, or that provide certain services such as photographers or website builders. Creative entrepreneurs in neighbourhoods that are in social-economic transition as a result of successful urban regeneration could profit from new local sales markets that appear as a result

of social mobility.

The other way around, the presence of social entrepreneurs in a certain area, creates a new market for other local entrepreneurs such as deli's, internet cafés, and other specialised stores and establishments. Because of their small size creative entrepreneurs prefer local services and products for things as bookkeeping and lunches.

Besides that, creative entrepreneurs require certain local services (input) and depend on a certain clientele formed by other companies (output), this is a third aspect that contributes to the development of creative clusters or concentrations (Manshanden and Jonkhoff, 2005). More important than local services, is the input generated by contact with colleagues or creative spill-over. Proximity of creative enterprises and the presence of a business network have a positive influence on creative production. Environments that provide these inputs are often found in central areas of cities, which have a variety of companies with a demand for specialised services and products.

5.5 Creative environments

Reflecting on the previous paragraphs, we can say that creativity has obtained a key position in the development of cities. But creative industries do not flourish in each urban environment, and its social, economic, cultural and physical impact on the development of the city, e.g. in urban regeneration, depends on the type of creative milieu that is created.

The fact that the development of a local creative clusters depends on certain preconditions has already been mentioned in the previous paragraph. But what are these conditions?

Creative environments

In order for innovation to flourish, the presence of a creative milieu or environment is an important precondition (Romein and Trip, 2009). In order to be able to define a creative environment, two types of creative milieus are distinguished: production milieu and consumption milieu [5.6]. The production milieu is based on a business-oriented approach, which focuses on the role of creative industries in generating innovative ideas and processes. Creative industries are regarded a 'normal' economic sector, but with special characteristics. It is a small sector but crucial to the innovativeness of the urban economy, and it consists out of numerous small, networked companies which thrive on face-to-face contact. The consumption milieu is based on a people-oriented approach and focuses

[5.6] analytical framework of the creative production and consumption milieu (Trip and Romein, 2010)

PHYSICAL SPACE	PRODUCTION MILIEU	CONSUMPTION MILIEU
	<ul style="list-style-type: none"> • quality and price level of working spaces • availability of business services • presence of knowledge-intensive industries • research and education infrastructure • concentration of businesses (creative clusters) 	<ul style="list-style-type: none"> • quality and price level of housing • availability of amenities (child day care, schools, shops, sport etc.)
SOCIAL SPACE	<ul style="list-style-type: none"> • relation networks (within creative industries and between creative industries and other sectors) • presence of 'buzz' • diverse labour pool 	<ul style="list-style-type: none"> • diversity of people • diversity of jobs
		<ul style="list-style-type: none"> • liveliness, 'street life' • (tolerance of) cultural diversity • (tolerance of) social diversity
SYMBOLIC SPACE		<ul style="list-style-type: none"> • authentic cultural heritage • 'tale' of 'DNA' of the area • sense of community • 'creative' image

on the role of qualities of cities in attracting creative talent. This concept is based on the idea that 'jobs follow people', which opposes the traditional view. According to Richard Florida (2002) – one of the advocates of this approach – cities should invest in attracting creative talent in order for business and jobs to follow. In order to attract 'creatives' that contribute to urban economic growth, a creative environment with a certain level of amenities is essential (Glaeser *et al.*, 2001 in: Romein and Trip, 2010).

Within the idea of the creative city working, living and leisure are heavily intertwined; the production and consumption milieu can be considered separately from each other and are complementary. "Creative industries cannot flourish in a 'creativity-unfriendly' urban environment that puts off creative entrepreneurs and employees, or even consumers of their creative products, who are for a considerable part found among the creative class." (Romein and Trip, 2009, p.3)

Currently most urban policies focus on the production milieu, because cities tend to see the creative industry as a stimulus for economic growth following the loss of the traditional economic base of manufacturing and standardised services. Creative industries were barely regarded as a promoter of cultural or social development. But in the academic debate the consumption milieu has recently gained increased interest. According to Romein

and Trip (2009) cities fail to recognise the specific characteristics and requirements of creative industries. The creative sector is very diverse and includes entrepreneurs with different motives and ambitions, varying from businesses that operate on a more commercial base but with a cultural profile (e.g. architects, designers, photographers) to creatives that find cultural integrity and creative originality the most important aspect of their work (Florida, 2002; Marlet and Woerkens, 2004; Romein and Trip, 2009; Rutten and Koops, 2013). The non-homogeneous character of the creative class also extends to other aspects; the preferences differ also according to age, stage of life, and personal attitude and circumstances (Romein and Trip, 2010). The researchers mention the following examples that identify the urban policy and planning issues that this discrepancy brings forward: the need for affordable housing and working spaces versus the gentrification of 'creative' neighbourhoods; day-to-day cultural life of creatives versus cultural-touristic mega-events; or low-profile culture versus landmark museum and concert halls. Therefore, urban policies on creative industries should focus on both the production and the consumption milieu and come up with a unified vision that focussed on the wide range of creative entrepreneurs and other creatives.

Another conception of creative environment is applied by Saris *et al.* (2008). His conception is

mainly based upon the creative production milieu, and he sees creative as a production factor. The creative economy plays a role in three different domains; inspiration, interaction, and transaction. In the first creativity is a source of inspiration and new ideas in all kinds of disciplines such as arts, science and technology. The first domain is formed by creative entrepreneurs and artists of all sorts. The conditions for (creative) production are shaped in the second domain, where ideas are given shape, and cultural and economic significance. This domain is formed by the interaction, and formal and informal meetings in for example 'third spaces' (Florida, 2002; Saris, 2008). An interactive urban environment is an important factor in the attraction of talent, and thus for economic development. In the third domain, transaction, ideas based on culture and creativity are transformed into products and services, and even in experiences.

Based on the level of transaction (experimental or market-oriented) and level of interaction (introvert or extravert), Saris (2008) defined four types of creative environments: creative workplace, incubator, transaction milieu and production milieu [5.7]. Neighbourhoods can potentially become a creative workplace (experiment, extravert) or transaction milieu (market, extravert), on the condition of investments in meeting places and working spaces for creatives. Incubators refer more to a milieu that is limited to a building, and offers therefore a more closed interaction environment. Also the production milieu is a more enclosed environment, but is

in contrast to the incubator market-oriented.

Quality of life and quality of place

One of the key concepts in addressing the conditions for creative city development and is used to describe a creative production and consumption milieu is 'quality of place'. According to Richard Florida (2002), the creative class concentrates in areas that offer specific qualities of life. The job mobility in this sector is high, so creatives are willing and able to move to locations that meet their favours (Boschma, 2004). Creatives tend to focus more on attractive living conditions than on the proximity of specific jobs (Trip, 2007). Thus, cities should focus on creating 'people climates' or consumer milieus in order to attract and keep talented creative people and entrepreneurs; on what Florida (2002) calls quality of place.

Since the 1960s quality of life is becoming an important location factor for companies, besides traditional factors such as labour force, knowledge, transport and communication infrastructure, accommodation, business networks and diversity in urban amenities (Trip, 2007). But quality of life in cities with problem neighbourhoods, such as Rotterdam, is often under great pressure (Ontwikkelingsbedrijf Rotterdam, 2011).

Quality of life is one of the conceptions that was introduced before quality of place and has been used widely in the discussion about urban competitiveness and economic development of cities. Frequently mentioned factors that play a role in



[5.7] creative environments (Saris et al., 2008)

conceiving quality of life are physical environment, climate, pollution, crime, and social facilities linked to education and health (Rogerson, 1999). According to Begg (1999) quality of life and urban economic performance are linked, but also other factors such as employment rate and economic productivity influence the performance and economic vitality of cities. Quality of life has become part of the location decision making process of industries and other businesses (Rogerson, 1999). Cost of living, public transport, safety and education are often mentioned as separate factors, but often they are attributes of quality of life. The contribution of quality of life lies for a part in the creation of a distinctive urban image to “act as a lure to both capital and people ‘of the right sort’ (i.e. wealthy and influential).” (Harvey, 1989 in: Rogerson, 1999, p.971) Thus quality of life has become an important part of promotion and city marketing.

But quality of life does not only play a role in the economic development of cities, but is also an aspect of personal migration, which contributes to the economic performance of cities. Rogerson (1999) states that quality of life is of great importance on the decision making process of migrants. The amount of human capital a city is able to attract depends on personal migration, and subsequently the economic performance of cities depends on the amount of human capital.

Quality of place is a more ill-defined conception of the set of qualities that make the city an attractive place of residence for the creative class. According to Florida (2002;2005) and related researchers these qualities includes aspects such as economic and spatial diversity, specific leisure and cultural amenities, a mixed population, the possibility for informal meetings in ‘third spaces’, safety, vibrancy, and aspects that are hard to define such as authenticity, tolerance, street life, buzz, and urbanity. Indefinable aspects, and the fact that scale-issues make others hard to grasp makes quality of place often intangible. “For planners, they are difficult to reproduce, let alone conjure out of the blue. For researchers, they are difficult to measure.” (Trip, 2007, p.503)

Nevertheless, preserved historic inner cities and old neighbourhoods close to the centres of large cities display a wide range of these qualities, as they are often diverse, lively and small-scaled, and as they offer a distinct and favourable combination of place qualities (Kloosterman, 2004; Manshanden and Jonkhoff, 2005; Trip and Romein, 2010). According to Trip (2007) authenticity is perhaps

the most important factor in the attractiveness of cities and places. It is hard to define and difficult measure but in sums up today’s symbolic economy based on feelings instead on tangible aspects such as production, transport and costs.

Although Florida’s ideas on the creative city, creative class and quality of place have been heavily criticised, they provide useful elements. For a long time the relationship between urban economic development and quality of life was only based on vague concepts, but Florida provided explicit links and the better qualifiable and quantifiable conception of quality of place. The latter also places more attention on social and cultural factors, than earlier conception on quality of life in relation to urban economic development (Trip, 2007). Although the presence of creative people alone cannot provide a strong enough base for long-term economic success (Scott, 2006 in: Trip, 2007), Florida has proven that there is a relationship between creativity index and growth in high-quality employment, income, innovation, high-tech industries and talent (Florida, 2005). Although he admits that the growth in low-quality employment is weak. In the Netherlands, as already has been mentioned before, a positive relationship has been found between the relative size of the creative class and employment growth, as well as between the number of creatives and the quality of a city as a place of residence (Marlet and Woerkens, 2004). What is missing in Florida ideas on the creative class is a description of how his ideas work in practice, while other such as Robert Reich and Jane Jacobs have explored the effects of respectively creative clusters, and tolerance, diversity and creativity in cities (Trip, 2007).

Creative city policy and qualities of urban space

When we speak about qualities of place of production and consumption milieus we speak about urban space and the amenities it provides. “Urban space is neither an empty medium, nor a neutral category in which ‘things’ are localised and activities take place. Instead, it is both an expression of social identities and relationships, and medium that creates and reproduces these identities and relationships. In other words, ‘things’ and activities are not just there, but they have a significance, which is different for different people.” (Trip and Romein 2010, p.4). According to Trip and Romein, qualities of place are most emphasised in the consumption milieu. But they are also relevant in respect to the creative production milieu, although they relate to more traditional so-called location economies. These aspects explain the clustering of (cre-

ative) business (Manshanden and Jonkhoff, 2005; Trip and Romein, 2010). Three of these aspects are rather generic but also apply to creative industries: co-location, labour market, and diversity of types of infrastructure, institutions and arrangements (Lorentzen and Frederiksen, 2008 in: Trip and Romein, 2010). The first, co-location, provides benefits from interdependencies as a result of forward and backward linkages by the supply of products and services, spill-over of technology, and circulation of knowledge, information and labour (Boschma, 2004; Montgomery, 2005; Manshanden and Jonkhoff, 2005; Trip and Romein, 2010). The relation between a local labour market and clusters of businesses helps to develop more and new ideas, knowledge and skills among creative workers. And finally, diversity in infrastructure, institutions and arrangements grows in such clusters, this includes financial arrangements for start-ups, shared affordable work spaces, vocation training and other types of support on location and specialised education modules helping small-scale entrepreneurs. These services and conditions are often found in creative business incubators.

But the creative sector cannot easily be regarded as a normal sector and has distinct characteristics that also ask for place qualities that are different from the conventional ones. The creative industry consists out of many small enterprises and freelancers, of which most are specialists in certain creative fields and that as a community possess a wide variety of skills. Rivalry and cooperation are expressly linked to creative industries. Crucial is the spontaneous exchange of new ideas, inspiration and implicit information on a daily basis, enabled and created by unexpected face-to-face contact, often referred to as 'buzz' (Gertler, 2004)

According to Trip and Romein (2010, p. 5) "the creative production and consumption milieu are defined by a complex and unique set of urban qualities". They distinguish three different types of urban space in order to define their qualities of place: (1) social space is shaped by the network of functional and social relationships and interactions; (2) symbolic space involves the perception of the specific significance of places by people that use the urban space; and (3) physical space is formed by the morphology of a place and location pattern of urban functions. Trip and Romein state that these three types of urban space are dynamic and change as a result of societal processes such as social stratification. Increased individualisation and diversification of lifestyles as well as changes in the scale and increased spatial range of activities,

enlarge the scope of especially social space. To this the researchers add that many of these place qualities can hardly be planned or planned for, especially not in the short term. Thus, the success of the creative city partially depends on what is already there. In this respect cities with well-preserved historic neighbourhoods and inner cities, with a wide arrange of cultural amenities and for instance a university, have an advantageous position in creating a creative consumption milieu (Kloosterman, 2004; Manshanden and Jonkhoff, 2005; Trip and Romein, 2010).

According to Trip and Romein (2010), a critical mass of creative people, workers and activities seems to be the best starting point in creating a creative production milieu and the development of a creative economy. Urban policies might exploit the place qualities successfully and create fruitful creative production and consumption environment, based on what is already there. But they doubt whether it is possible to create these place qualities on the long term. For that reason creative city policy should be aimed at the 'organic' development of a creative environment, built upon what is already there. Eventually, when urban areas have obtained a creative image, more creative firms will be attracted. Accordingly, creative city policy should be city-specific, instead of based on the duplication of best practices. In addition creative city policy should be inclusive and "span all government operation, rather than being confined to 'cultural departments'" (Russo and Van der Borg, 2006 in: Trip and Romein, 2010, p.5). Another logical partner within the municipal government in the creation of creative urban environment is the economic department, but according to Trip and Romein (2010) and others, policies of creative city development should be integral combining the policy fields of economy, society, spatial planning, housing, culture and leisure.

Trip and Romein (2010) provide an analytical framework that help to define the creative production and consumption milieu of cities. This framework is based on an inventory of factors derived from academic and semi-academic literature on creative city development. This framework is initially aiming at the analysis of the creative place quality of a city, but could most certainly also be applied on the scale of a city district of neighbourhoods. In that case one has to keep in mind that the range of certain place qualities is limited to certain borders, and place qualities that are located outside of a certain district of qualities of Rotterdam's and Rotterdam-Zuid's urban space will be

assessed in the next chapter.

Creative industries in urban development

Until now the creative industries and creative class are mainly discussed in relation to urban economic development. The question that still remains is: how can the development of a creative urban economy positively influence the social-economic regeneration of problem neighbourhoods, and how can creative industries and other 'creatives' contribute to better living conditions among disadvantaged residents?

According to Verschoor *et al.* (2009), creative industries are more and more deployed by urban governments as catalysts in the redevelopment and regeneration of neighbourhoods. Creativity has a positive effect on the social climate of neighbourhoods, improves the external image of cities as well as the attractiveness of cities for private investments (Gertler, 2004; Russo and Van der Borg, 2006; Jeanotte, 2008).

Verschoor *et al.* (2009) take the creative incubator as an example of a creative cluster. The creative incubator is a manifestation of the cooperation between local (or regional) government, businesses and knowledge institutions that support creative entrepreneurship (Romein and Trip, 2010). The creative incubator also referred to as business incubator is a form of multi-tenant housing and a breeding space for starting entrepreneurs and provides all kinds of support for start-ups and other small companies. Creative incubators provide an environment that stimulates face-to-face contact and transfer of tacit knowledge, skills, services and products, offers management support (e.g. finance and accounting).

Social impact

The research of Verschoor (2009) has shown that creative incubators have a cultural, social, economic and physical impact on their environment. She measured the impact of creative incubator on ten different types of living environments as well as two non-residential living environments, based on literature and expert meetings and interviews with creative entrepreneurs and workers. According to Verschoor, an area with large social-economic problems such as unemployment and low incomes will profit from the social impact of incubators. Also Pratt (2008) mentions that many studies have shown that creative industries and arts can play a role in addressing issues in problem neighbourhoods such as social exclusion and community support. But, this will not produce great arts or lots of money. So the contribution of economic

development when creativity is put into action in urban regeneration is very much limited. However, Pratt also states that creative production (and consumption) is "based upon a fashion model – a rapid turnover of product and a winner takes-all-marketplace – only some places will benefit from the economic activity and the social and cultural benefits" (2008, p.115). Thus, the creative class concept does not bring ready-made attributes for creative city policy, successful policies depend on thorough investigation of local qualities of place. The effect of creative industries occur among both individuals and on the community as a whole. Examples are the transfer of knowledge, skills, ideas and good practices, as well as the stimulation of interaction and meetings between people. Important issues that can be influenced by local creative activities are: personal development is based on the gain of self-confidence, training and the development of new useful (social) skills and creativity (Matarasso, 1997 in: Verschoor, 2009; Michalos, 2004 in: Verschoor, 2009).

Creative industries can contribute to personal development by participating in local social or cultural projects and by provision of training, courses and for example art projects. Artists for example are often involved in neighbourhood projects. They themselves often originate from these neighbourhoods and are certainly not wealthy, thus their economic position often corresponds with the economic position of other locals (Markusen, 2006). According to Markusen, cultural and social projects also contributed to an increase of social cohesion in neighbourhoods and help to develop the identity and internal image of neighbourhoods as well as of new traditions and local pride about traditions and cultures. Local creative projects also resulted in increased participation among residents.

Another effect of incubators located in neighbourhoods with social-economic problems is the creation of employment. According to Rutten and Koops (2013) the employment relative growth in arts and culture, and in the creative industry exceeded that growth of overall employment. Creative industries have also a positive influence on the economic development of cities based on creative and economic appeal (Van Aalst *et al.*, 2006). The contribution of creative industries is mainly based on the presence of a lively and creative production and consumption milieu in creative cities, which in certain extend also appeals to businesses and workers outside the creative sector. The attraction of creative businesses outside the creative

sector, as a result of the presence of a creative atmosphere, consequently can contribute to further growth of employment.

In addition, the presence of creative enterprises and cultural amenities show increased real-estate prices, this also counts for problem neighbourhoods (ABF Research, 2007; 2008 in: Verschoor, 2009).

Thus, the attraction of creative industries to problem neighbourhoods creates social, cultural and economic added value. This surplus value of neighbourhoods, and the increased attraction of creatives often results in gentrification. As land and real estate prices increase problem neighbourhoods will become of increased interest for developers.

The social and economic feasibility of new urban development aimed at higher income groups will increase, and retaining social climbers and attracting middle and higher income groups to up-till-then disadvantaged neighbourhoods will become one of the possibilities. This on the other hand will bring forward problems for the lower income groups and eventually as well for starters and other small (creative) entrepreneurs with small budgets and relatively low incomes (Markusen, 2006; Pratt, 2008). "Art galleries and rich loft-owners move in, the artists are forced out due to rising prices". (Shorthouse, 2004 in Pratt, 2008, p.111) Although this seems to be a logic argument when speaking about gentrification, the effect of creative industries and creative amenities on the creation of real estate value is often questioned (Stern, 2003 in: Markusen, 2006; Verschoor, 2009). Also the role of gentrification in general, in this case referred to as social mixing and the attraction of middle classes in lower class housing areas, in order to boost urban regeneration is sometimes questioned (Lees, 2008). Ongoing gentrification and the development of market-driven diversity can even result in false authenticity and lead to indirect displacement of disadvantaged residents, undermining of local attachment of the working class, and ethnic and social segregation (Arapoglou, 2012).

According to Markusen (2006) are is often zoning laws and economic development decisions made by policy makers that shape processes of gentrification. Yet, often the role of creative industries and creative milieu development plays a role in these municipal policies. So, the top-down role of the government in addressing urban generation based on creative talent development is indispensable.

Cultural impact

The cultural impact of creative industries is be-

coming increasingly important (Verschoor, 2009). The cultural impact of creative incubator influences not so much the social-economic regeneration of problem neighbourhoods and the reintegration of their residents, central is the effect on the possibilities of cultural production, on producers of culture and on culture itself. Nevertheless, these effects indirectly help the population of residents, as physical space is offered to locals to produce culture. Furthermore, creative clusters and creative incubators contribute to a tolerant, open and diverse creative production and consumption milieu, making neighbourhoods and cities attractive to new creatives (Florida, 2002; Van Aalst *et al.*, 2005). According to Van Aalst *et al.*, cities should restructure their policies on creative city development and aim at investments in social infrastructure and social place qualities as tolerance and openness. Investments in cultural amenities, but also in creative business incubators as the leading means to attract a creative class, do not prove to be directly beneficial.

In addition creative incubators, as a form of creative clustering, stimulates (cultural) innovation (Sargentini, 2002 in: Verschoor, 2009). Face-to-face contact, the presence of creative business networks, openness and diversity of people and businesses contribute to cooperation, cross-pollination and synergy, which are essential aspects of this effect.

Spatial impact

Creative industries and cultural amenities prove to have a certain influence of their environment and are therefore often used by developers, governments and housing corporations as a mean for urban revitalisation (Verschoor, 2009). When we speak about the spatial impact of creativity on cities, we mean the spatial impact of creative incubators in the process of creativity influencing the revitalisation of the city, ranging from problem neighbourhoods and desolate industrial zones or business parks, to inner cities and upper-class residential areas. This phenomenon is referred to as 'culture-based revitalisation' (Stern and Seifert, 2007 in: Verschoor, 2009) or culture oriented economic development (Russo and Van der Borg, 2006 in: Verschoor, 2009). An example of the spatial impact of creative industries has already been mentioned earlier on: gentrification. This process is not only the result of the social and economic impact of creativity, but also of the spatial impact. The spatial effects of creativity-led revitalisation on gentrification are based on the creation of popular neighbourhoods, and on the development of

healthy neighbourhoods. Popularity and a healthy living environment are keys to higher appreciation of neighbourhoods by residents, added value and eventually higher real estate prices. Physical interventions in order to contribute to the process of gentrification are the improvement of housing conditions, the transformation of living environments, the addition of amenities and the improvement of infrastructure. According to Kam (2008 in: Verschoor, 2009) this does not only contribute to increased economic and social benefits, but also to the reduction of social and health care costs as living conditions of residents are improved.

The effect of creative industries on the revitalisation and regeneration of neighbourhoods is described by Verschoor (2009) in three phases. The point of departure is a neighbourhood that once was a fairly good and well-functioning neighbourhood, but has become a run-down neighbourhood unattractive to investors. Residents in this neighbourhood are part of the lower middle class. During the first phase creatives with limited financial means settle in the neighbourhood in search for affordable housing and business space. During this phase the first middle class residents are attracted, and start to improve dwellings with limited means. Exemplary are the *klushuizen* that appear more and more in Dutch cities and provide people the opportunity to realise their housing needs by transforming cheap dwellings; they are often located in deprived neighbourhoods.

During the second phase the attractiveness of the neighbourhood has increased, as the neighbourhood provides a more lively and creative milieu. The influx of new middle class residents, retailers and creative entrepreneurs increases. Gradually firms and retailers from upper segments are attracted, and the neighbourhood gains the attention of real estate developers. Rising land, property and rental prices reflect the increased popularity of the neighbourhood. Both cultural and economic capital increase during this phase, as more creative entrepreneurs and artists as well as middle class residents settle in.

During the third phase project development become the most important actors in the development of the neighbourhood. Affordable working and living space for low income residents and for original small scale entrepreneurs has already become scarce, but also the creative professionals have difficulties in finding cheap and suitable working and living space. The cultural capital of the neighbourhood is being replaced by economic capital.

According to Russo and Van der Borg (2006) this extreme form of gentrification can have negative consequences for the liveability of neighbourhoods of the short term, and on urban economic development on the long term. When large parts of a city become gentrified, creative entrepreneurs and artists are forced to search for working and living opportunities in other cities. Therefore, cities should focus their policies of creative city development on attracting and retaining creatives. In addition, gentrification also results in inevitable efflux of the lower class. Where do they have to go? Most certainly we can state, that problem neighbourhoods and their residents are not helped by over the top gentrification.

Interact, expose and attract

But still, as has been said, creative industries can most certainly contribute to the regeneration of problem neighbourhoods. Verschoor (2009) provides a development model or concept for creative business incubators and their role of tackling problems in neighbourhoods such as Afrikaanderwijk, Feijenoord, Bloemhof and Hillesluis. This model is called 'interact'. The model interact is aimed at the interaction between creative industries and residents. Creative entrepreneurs and artists bring in diversity and reduce the mono-functionality of neighbourhoods, create a livelier environment and try to come into contact with local residents. Interaction takes place on locations that are lively, well-known and part of the spatial main structure of the neighbourhood. Visibility of creative and economic activity is vital to both interactions between creatives and residents, as to the economic success of creative entrepreneurs. Essential criteria to the success of this model are: the involvement of housing corporations, as they often own large quantities of real estate in problem neighbourhoods; the involvement of residents in creative projects; low rents; and a clear program geared to a social contribution, such as educational programs and support of creative entrepreneurship (e.g. financial support, business training, services).

Verschoor (2009) also developed two other models: 'expose' and 'attract'. In case of Rotterdam-Zuid, and especially the area of Kop van Zuid and Parkstad, these models are relevant as well. The model expose is meant for areas, where small creative entrepreneurs and starters have difficulties to find affordable and suitable working or retail space. Creative and cultural expressions are restrained. Expose can contribute to strong, exclusive and innovative amenities. A central theme in

this model is the diversity of cultural and creative entrepreneurship and the demonstration and consumption of creativity to and by residents and visitors. Verschoor mentions creative entrepreneurs such as fashion and industrial designers, architects, gallery-owners and artists. The use of this model on Kop van Zuid and Parkstad can contribute to the development of an environment that is attractive to both creative entrepreneurs as well as to middle and higher class residents.

The model of attract servers as a handle for the development of abandoned industrial and business locations. In this case creative industries are used as a mean to revitalise desolate urban areas and bring them to the attention of residents and businesses. In this case creative industries are often temporary, fitting the flexibility of creative entrepreneurs as well as the location itself. Kop van Zuid, Parkstad on their surroundings are former harbour areas. Some locations in this area are desolate and offer inspiring and authentic business location such as old factories and harbour buildings although many are demolished between the 1960s and 1990s. Parkstad is one of those desolate areas, but lacks the presence of old industrial buildings and warehouses. Nevertheless, many of the symbolic qualities that come with these types of location can still be felt in the area. Although Parkstad lacks built heritage, it does offer the opportunity and space for temporary experimental and creative development.

5.6 Examples

In this paragraph a few examples of relevant projects are discussed, which are based on local (creative) economic activity and contribute to social-economic regeneration in problem neighbourhoods. This paragraph is continuation of paragraph 5.3 in which a distinction is made between individual projects and neighbourhood projects on the one hand, and between physical measures and non-physical measures on the other hand. As this research is about spatial interventions in the urban environment, the projects described here are all physical measures.

Practical examples of physical neighbourhood projects are: Creative Factory in Rotterdam [5.8] and Grote Pyr in The Hague which are business incubators; Energiehuis Dordrecht providing affordable business space; the reintroduction of living-working units in Indische Buurt Amsterdam; Quality4 in Venlo and the clean out in Javastraat Amsterdam; and Open Lab Ebbinge in Groningen. These measures are taking to increase

economic activity in neighbourhoods, and are less geared on the social and economic reintegration of residents. Examples of physical projects aimed on the individual are: Grote Pyr as well; multifunctional centre Vrouw en Vaart in Amsterdam; and Kapelplein in Rotterdam.

Creative Factory

The Creative Factory in Rotterdam-Zuid, is creative business incubator located in a former silo building bordering the Maashaven, closely situated to a metro station. The incubator buildings was opened in 2008, and is currently accommodating 70 creative entrepreneurs specialised in media, design, music and events, fashion and commercial services, and so on (Nijkamp, 2012). The entrepreneurs rent on or more working places, which are situated in large open spaces, keeping rental prices low. Flex spaces are also available in the Creative Factory, as well as coaching services, facilities (e.g. reception, meeting rooms, catering) and services providing support in gaining commissions. Companies are clustered according to their specialisation. The Creative Factory provides space for face-to-face contact and exchange of knowledge, skills, ideas, products and services, and also give access to a wide network of businesses and partner organisations, that support the Creative Factory financially. According to Nijkamp (2012) the entrepreneurs of the Creative Factory, acknowledge their role in the successful regeneration of Rotterdam-Zuid. They can provide coaching for local residents that are interested in certain professional practices (e.g. Stichting Young Up), or they could cooperate in social and cultural neighbourhood projects. According to Nijkamp the Creative Factory contributes to a positive image of Rotterdam-Zuid. But their contribution to gentrification is limited and new groups of inhabitants such as creatives and middle class residents are not yet attracted to Rotterdam-Zuid. In addition, she mentions that only few entrepreneurs of the Creative Factory actually live in one of the surrounding neighbourhoods

The impact of the Creative Factory on its direct environment, Rotterdam-Zuid, is mentioned but also questioned by the entrepreneurs accommodated in the business incubator. The familiarity with the Creative Factory among residents is doubted by some, as well as its contribution to the surrounding neighbourhoods. But most of them agree that the Creative Factory adds to the diversity in the neighbourhoods, both by the provision of unique and diverse products and services and by the presence of new groups of people: creative,

[5.8] Creative Factory in Rotterdam-Zuid (Creative Region, 2013)



[5.9] Open Lab Ebbinge (Sky-scrapercity, 2013)



autochthonous and well-educated entrepreneurs. The creative enterprises have almost no local clients or customers, with the exception of Stichting Young Up that aims at youth from Rotterdam; most entrepreneurs are aiming at the national market, some on the urban market. The Creative Factory has limited training places for students from HBO, MBO and university, however the number applicants is far beyond the offer.

Finally, opinions of creative entrepreneurs on their contribution to and need for involvement are very different. Some mention their involvement in local social projects, while others wish to be more involved. There are also entrepreneurs stating that top-down steering of social involvement by the managers of the Creative Factory should be avoided, and address that the entrepreneurs themselves as well as the large partner organisation of the Creative Factory such as ABN-AMRO should take the initiative (Nijkamp, 2012)

Other neighbourhood projects

Like the Creative Factory, Grote Pyr in The Hague is a project that aims both on a mix of measures (Ouwehand and Van Meijeren, 2006a; 2006b). The project, which can be defined as a business incubator, aims at attracting and developing business activity, but is also geared at personal development. Grote Pyr accommodates a combination of housing and working spaces, in a former school building. The building houses an architecture firm, a carpenter, a bicycle repairer, as well as a restaurant and a children's museum. The latter two attract lots of local residents, increasing the liveliness of the neighbourhood.

Energiehuis Dordrecht is also an example of a creative incubator for start-ups, but also for podium arts. It is located in a former power plant and forms a temporary accommodation. But not only existing buildings can provide suitable and affordable space for creative entrepreneurs, also newly built (residential) buildings and their ground floors can provide business space. Subsequently, this leads to an increased multi-functionality and diversity, which has a positive effect on the liveliness of an area. Yet, financial constructs are needed in order to realise affordable business space (Ouwehand and Van Meijeren, 2006b).

Other physical neighbourhood projects relate to the redevelopment of existing real estate such as dwellings and retail buildings. In many neighbourhoods commercial spaces located in residential streets have been transformed into housing during the last decades, as small-scale local entrepreneurs encountered difficulties competing with larger re-

tailers. The former use of these buildings can still be recognised in the architecture and lay-out of the façade (Ouwehand and Van Meijeren, 2006a). An example of the retransformation of housing into small business spaces and living-working units can be found in Indische Buurt in Amsterdam. Another type of transformation is performed in areas dealing with commercial activities causing nuisance or criminal activities, such as *belhuizen* or 'telephone offices'. A project in Venlo called Quality 4, and the cleanout in Javatraat in Amsterdam provide such measures. The transformation is geared on the attraction of new types of entrepreneurs and a higher level of amenities. Authentic and unique shopping streets and neighbourhoods such as De Pijp in Amsterdam, Lombok in Utrecht and Witte de Withstraat in Rotterdam, with a diversity of shops and consumer services such as restaurants have proven to be economic triggers in social-economic weak urban areas.

The last example of a physical neighbourhood project that is mentioned here is Open Lab Ebbing in Groningen [5.9]. This project is strongly aimed on the development of creative industries (Ministerie van Economische Zaken, 2010). Open Lab Ebbing is part of a larger project of the redevelopment of Ebbingekwartier into a creative urban environment with a mix of living, retail, working and culture, and with the addition of services for the creative industry and knowledge exchange. Part of the plan is Het Paleis, 'the Palace', which accommodates living, working and meeting places for creative start-ups and artists. Opposite Het Paleis, Open Lab Ebbing is being developed, a temporary 'micro city'. This micro city offers space for cultural, innovative and knowledge intensive activities. Moreover, Open Lab Ebbing with its temporary infill counteracts cluttering (*'verrommeling'*) of the area during the redevelopment of Ebbingekwartier.

Individual projects

Two individual projects are mentioned here: Vrouw en Vaart in Amsterdam and Kapelplein in Rotterdam. Vrouw en Vaart is a multi-functional centre that supports women by offering activities aimed at improving their own social and economic position, and stimulating (informal) meetings, and sports and leisure activities. The centre provides business training and financial support for women that want to start their own business.

The reconstruction of Kapelplein in Rotterdam is a different type of project, but is also geared on personal development, as well as on the improve-

ment of the neighbourhood as a whole. The transformation of this square in the neighbourhood of Delfshaven is aiming at the stimulation of informal encounters of residents in order to develop their personal networks, and on the improvement of liveability. This is being achieved by physical interventions (e.g. playgrounds, green), as well as by the redevelopment of commercial real estate and the organisation of youth activities on the square (Ouwehand and Van Meijeren, 2006a).

5.7 Criteria for a strong and creative neighbourhood economy

Local economic development is only possible, when there is enough local economic support – in the form of purchasing power among residents, and on the short term through financially advantageous policies (i.e. *kansenzones*) – and when the environment is attractive enough. Only then the realisation of new shops and other commercial services, or the improvement of local amenities can be achieved (Ouwehand en Van Meijeren, 2006b). But this statement mainly counts for businesses that aims at local consumption of products and services. A strong local economic basis is important for the social-economic regeneration of problem neighbourhoods as it increases self-esteem of residents and participation in society (McGregor and McConnachie, 1995), and provides local employment opportunities, but local businesses can also function as a stepping stone to the wider urban labour market. But the contribution of the neighbourhood economy to social-economic regeneration is not only limited to the creation of jobs and the provision of links to the job market. The neighbourhood economy, has also proven to be able to contribute to increased participation, to provide possibilities for learning, training and development of skills and talent, and is also a breeding ground for new entrepreneurs, for example in the creative industry.

In this paragraph the criteria for the development of a vital, preferably creative, neighbourhood economy will be addressed. The criteria should give direction to the strategic development of the neighbourhood economy, and emphasise on spatial and physical criteria that relate to the work of urban planners and designers.

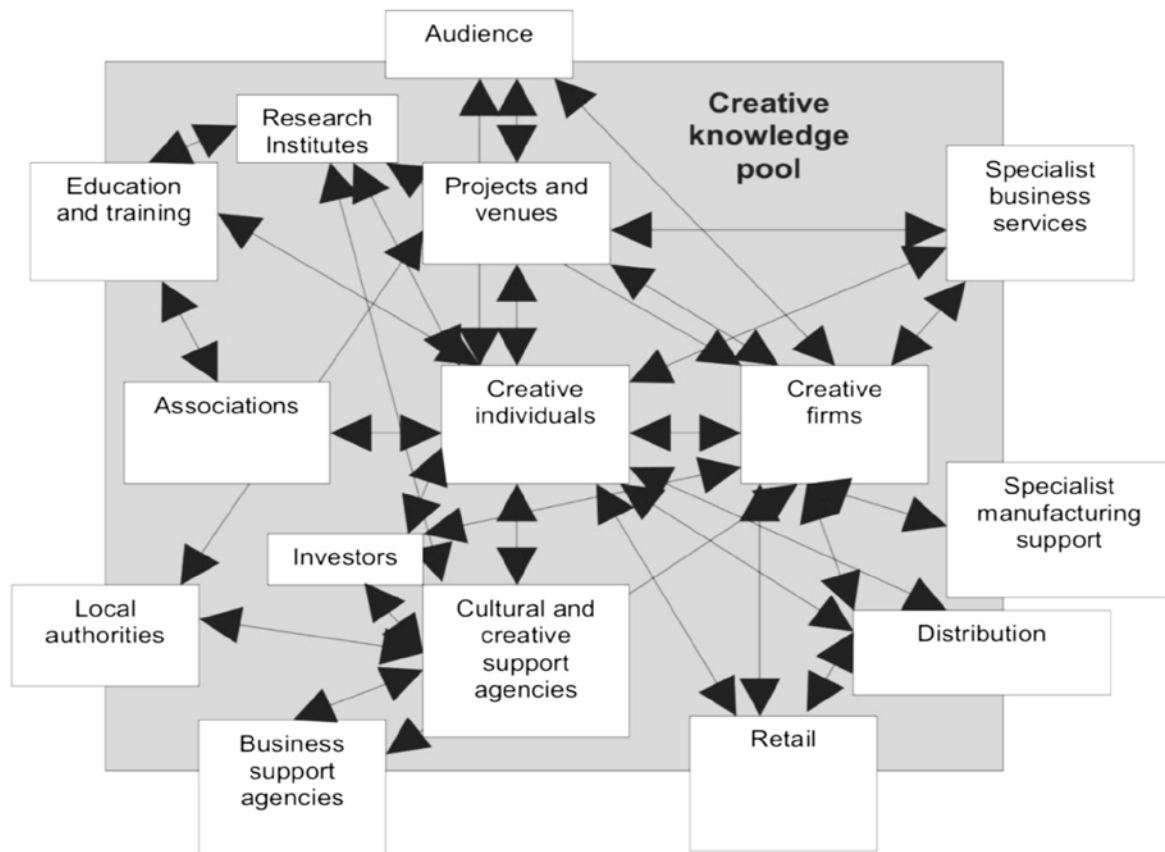
Local social qualities in creative milieus

As has been mentioned before, the development of a creative production and consumption milieu depends on certain urban place qualities (Romein and Trip, 2010). These criteria go beyond the tra-

ditional localisation economies or location factors. An example that relates to a certain traditional location economy is the presence of associated enterprises, in this case the presence of other creative businesses (Florida, 2002; Manshanden and Jonkhoff, 2005; Kloosterman, 2005; Van Dijk and Schutjes, 2007; Romein and Trip, 2009). In addition to this, the development of a creative urban economy depends on a large and diverse labour pool as well as on the presence of a knowledge infrastructure, which contributes to the (creative) business networks (Boschma, 2005; Montgomery, 2005; Romein and Trip, 2010). In contrast other sectors, ‘untraded’ and ‘non-trade’ dependencies play an important role in clusters of creative industries. Untraded dependencies are social values such as acquaintance and trust and cultural values that influence business-to-business transactions; an example of a non-traded dependency is the presence of ‘buzz’ (Gertler, 2004). Thus, in creative production milieus social interaction is promoted, taking place in lively public places and streets, and in ‘third spaces’ as “informal, non-regulated meeting spaces and gathering places of creative people, either entrepreneurs, freelancers or students” (Romein and Trip, 2010, p.24).

Creative entrepreneurs depend both on the social and cultural openness of the local creative community and business networks, and on their actual social position within this community. Sometimes creative clusters evolve out of the social environment higher education institutes. An example is YES!Delft Creative, a joint local government-university initiative which was based on the already existing incubator for near graduates and graduates of faculties of ‘hard sciences’ that was successfully created in 2005 (Romein and Trip, 2010).

The networks of creative industries and clusters are complex and extended. They are based on traditional value chain models: creation, manufacturing of proto-types, mass reproduction and distribution, and exchange and retail. A fifth stage is added to the model used in the Netherlands, namely consumption (Rutten *et al.*, 2004 in: Romein and Trip, 2010). Yet, this model cannot easily be made operational in forms of creativity produced on stages such as operas, which are not mass-reproduced and retailed. The creative network of developers, designers, producers, retailers and consumers is even more extensive. Creative clusters and their networks also include supporting services and activities such as knowledge transfer by higher education institutions, training of practical skills, consultancy and accountancy, and a certain audi-



[5.10] the creative knowledge pool (CURDS, 2001 in: Romein and Trip, 2010)

ence (e.g. consumers) Together creative industries and affiliated companies and institutions form a pool of knowledge that supports creative activities [5.10]. The network of the knowledge pools has most of its links on the local and regional scale; only a few are links on a global scale (Romein and Trip, 2010)

Besides the presence of social networks of creative entrepreneurs, other creative and servicing parties, another aspect that is of great importance on the exchange of (spontaneous) knowledge, ideas and inspiration is social and economic diversity. Exchange not only happens within circuits of similar businesses; Jane Jacobs (1969) states that many innovations are based upon new, unexpected combinations of ideas that originate from different creative and other sectors. These face-to-face contacts lead to the 'buzz' of the city. According to Romein and Trip (2010), this 'buzz' has a strong spatial component and is specific for certain creative communities and to the places where creative entrepreneurs, employees and consumers meet each other informally, the 'third spaces' such as cafés, restaurants and cultural venues (Florida, 2002).

Moreover, not only diversity among the creative class and creative industries, but diversity of people in general contributes to a creative production and consumption milieu. People bring liveliness and

diversity of ideas, influences and inspiration (Jacobs, 1961; Romein and Trip, 2010). This happens even when they are not first and foremost involved in creative activities at all. Diversity requires tolerance and openness to social and cultural diversity, meaning above all, that minorities and subcultures are being emancipated and fully able to participate in society (Florida, 2002). In respect to this Romein and Trip (2010) come up with a very important notion related to the Dutch context and the social climate on the level of the neighbourhood. In many Dutch cities, creative industries especially young creatives have a preference for relatively inexpensive 19th century neighbourhoods close to inner cities. But these neighbourhoods – before the process of creative gentrification starts – are decayed, poor and unsafe. In the Netherlands many of these neighbourhoods are largely populated by immigrant and low income groups, whose values and attitudes towards the creative class, let alone artists, bohemians or gays, are conflicting. "Social economic inequality may increase this, as it tends to increase polarisation between groups." (Romein and Trip, 2010, p.30)

Besides diversity, liveliness and street life are important factors in the development of a creative production and consumption milieu. Jane Jacobs (1961) already mentioned in her book 'Death and life of great American cities' that vital neighbour-

hoods have to be lively neighbourhoods. Diversity alone is not enough; people should be able to meet. In case of the creative environment this means more than busy streets. Places and events must be produced where creative entrepreneurs have the opportunity to meet other entrepreneurs, as well as creative minds, potential customers or creative graduates. Romein and Trip (2010) stress that for smaller cities such opportunities play a role on the scale of the city, but in larger cities and larger neighbourhoods with larger creative communities, these opportunities can also be shaped on a local level.

Local physical qualities in creative milieus

As already has been mentioned before, a creative production and consumption milieu is formed by vital, lively and diverse neighbourhoods (Jacobs, 1961). Also in order to create a vital neighbourhoods economy (Jacobs, 1969). Lively and diverse neighbourhoods are formed by: a mix of functions, a finely-grained morphology of small urban blocks and streets, a mix of building from different sizes and ages, and a high concentration of people on the streets.

According Romein and Trip (2010), a strong concentration in one spot of liveliness and of actors from the knowledge pool is not needed in order to for neighbourhoods to provide a creative milieu, although a certain degree of concentration as well as a sufficient amount of these facilities and characteristics should be present locally. Creatives also tend to located themselves not within the direct environs of a creative milieu; but the proximity and well as the accessibility (i.e. good connections) of a certain high-quality creative milieu, such as a historic inner city is an essential contributor to face-to-face contacts.

Another spatial quality of place, which is directly connected to the success of historic urban environments, is the its architectural quality. The value of high-quality architecture does not necessarily mean the presence of internationally renowned design, but it more relates to the distinctiveness and authenticity of historic places and architecture. A similar effect is exerted on creatives by the presence of another kind of distinctiveness and authenticity, which can also be formed by for example former harbour areas that are transformed into modern neighbourhoods which resemble inner cities in terms of scale and lay-out, are creative environments which have a certain roughness, formed by old industrial buildings, warehouses and so on (e.g. Eastern Docklands in Amsterdam).

But, one of the most important factors in the attraction, development and growth of creative industries is the availability of affordable working spaces, in order to accommodate the start-ups and small enterprises that for a large part constitute the creative industry (Ouwehand and Van Meijeren, 2006b; Wille, 2009; Romein and Trip, 2010). Creative entrepreneurs and other creative talent prefer to settle in neighbourhoods with affordable housing and working space, but gentrification can be a threat to creative milieus as these neighbourhoods are becoming more and more expensive as they become popular. Thus, investments are needed in the provision of affordable working and residential spaces, which are more than a short-time solution (Romein and Trip, 2010). Examples of appropriate accommodations are combined living and working spaces, or creative business incubators. Creative starters and freelancers often work at home, and working, living and leisure are intertwined activities among many creatives.

Another important spatial factor in successful creative environments is the availability and quality of amenities. The presence of good and sufficient amenities is also a key aspect of lively and economic vital neighbourhoods in general (Van der Meer, 1996; Florida, 2002; Reijndorp, 2003 in: Ouwehand en Van Meijeren, 2006a; Clark, 2004 in: Romein and Trip, 2010). The amenities provide not only services and products for creative entrepreneurs, but also for the creative individual as well as their households. Florida (2002) emphasises that these amenities should not only be restricted to high culture (theatres, symphony, ballet, opera, museums, etc.), but also to professional sports facilities and events, parks and other recreational facilities, as well as restaurants, cafés, market, shops, and good schools, health care services and child day care, to even bike lanes and nature. These are mainly amenities that supply creative (and other) households with their daily or more specific needs.

Small creative entrepreneurs often also depend on other facilities more closely related to their business activities. Starters and small firms cannot sustain a high level of facilities on their own and are therefore depending on nearby services and facilities such as print shops, business support and accountancy. Incubators often provide these and other facilities such as meeting rooms, ateliers or exhibition spaces, or even secretarial support and media and communication services. Sometimes these facilities are provided by other parties. An example is the Lloyd Hotel in the Eastern Docklands in Amsterdam, which provides local creative

entrepreneurs meeting and exhibition spaces (Romein and Trip, 2010).

Some of these amenities, such as restaurant and cultural venues and in some extend business incubators as well, can be named as 'third spaces', the public and semi-public places where creatives can meet each other informally for business of unexpected encounters (Florida, 2005; Trip, 2007; Romein and Trip, 2010).

Local symbolic qualities in creative milieus

Besides social and spatial qualities such as networks or amenities, the framework introduced earlier on in this chapter that helped to define creative production and consumption milieu also contains symbolic qualities relating to the meaning of places. The services and products of the creative industry are often characterised by symbolic qualities as design, authenticity and experience. These same characteristics also account for the qualities of place of creative environments, and are often referred to as the 'DNA' of a place. The DNA or 'tale' or 'narrative' of a neighbourhood or city is often related to the history and development of that place, and is visualised not only through spatial elements such as old factories, warehouses or schools, but also through the urban layout of a place (e.g. formed by harbour areas or canals). These characteristics come with a high degree of authenticity and are widely appreciated by creative entrepreneurs and other creative people (Trip and Romein, 2010).

Other symbolic qualities that are described by Trip and Romein are scenes, communities and image. Scenes address the meaning or value of a community that is addresses to certain amenities (Silver *et al.*, 2006; 2007 in: Romein and Trip, 2010). Not all scenes are related to creative communities, both they often are. Certain scenes, such as the presence of a certain ethnic scene, could be a starting point for the development of a specific creative production and consumption environment. An example of a study on this subject is the 'Atlas of cultural ecology' (Dudok *et al.*, 2004). This document was published by the municipality of Rotterdam and describes the dynamics and forces behind developments in the city and the way people and entrepreneurs use the city in relation to the network society. The city tried to provide a new planning tool offering a new scope on the city (Teeffelen, 2005).

The final place quality that will be mentioned here is 'creative' image. A creative image is formed by the location of creative activities ranging from creative businesses and amenities to physical,

social and symbolic place qualities. The attraction of creatives reinforces the creative image of a neighbourhood or city; and city branding has become one of the prime policy issues of today's cities (Kavaratzes and Aswoth, 2005 in: Romein and Trip, 2010). As said, creatives tend to settle in traditional creative neighbourhoods such as inner cities and old districts with a strong creative production and consumption milieu. According to Romein and Trip (2010) the city of Rotterdam has a lack of these neighbourhoods. So the city focuses on other strong aspects that appeal to creatives: the rhythm of the river and the harbour, the space, anonymity and great scale of the city, and its 'edginess' and cosmopolitan image (Van Ulzen, 2007). "The open and unfinished nature of buildings and spaces, and the opportunities these offer for experiments appear more important for some creative entrepreneurs than third spaces, cosy street life, or pedestrian-friendliness." (Romein and Trip, 2010) Image and 'DNA' play a role on all levels of scale, from the neighbourhood to the city and the region.

Urban qualities of place in creative milieus

On the scale of the city physical, social and symbolic place qualities play a role as well in the development of a creative industries and the attraction of a creative class. As has already has been mentioned a creative environment requires diversity of people, cultures and businesses. This diversity is based upon openness and tolerance towards cultural and social differences (Florida, 2002; Romein and Trip, 2010). According to Florida tolerance is an even more important place quality than the presence of amenities. The importance of immigration in creativity-led economic development in cities is addressed by many (Hall, 2000; Landry, 2000; Florida, 2002). External contact and immigrants bring in new ideas, skills and talents. Although the contribution of an immigrant population is believed, a diverse immigrant population can also have adverse effects on the success of creative environments. Social and racial segregation and isolation have negative effects on the economic success of cities and their creative businesses (Thomas and Darnton, op. cit., 165 in: Romein and Trip, 2010). They stress that the attraction of highly educated and creative talent is important, but cities need to tackle social inequalities in cities as well in order to create a successful and productive creative environment.

On the other hand, undiscovered creative talents may be among the disadvantaged, immigrant population of cities, which cannot and will not ex-

ploited as a result of social, cultural and economic inequalities (Scott, 2006). In addition Landry (2006) states that creativity could even bridge the gap between the successful and unsuccessful, probably even more that the stimulation of economic activity can.

Problems concerning immigrants and social inequality are frequent in Rotterdam, where the “public debate has put a focus on cultural difference, increasing feelings of unsafe and polarisation between groups”. (Romein and Trip, 2010).

Liveliness and street life are social place qualities that are relevant on the scale of the city as well. As said before, lively inner cities can provide an environment for recreation, meetings and leisure to creative that live of work outside these inner cities. Historic inner cities have a positive effect on creative cities as a whole. Also large cultural, musical and culinary events display city-wide, or even regional and national effects. Examples from Rotterdam are the International Film Festival and North Sea Jazz Festival. However, creative city policies should not only focus on large urban and ‘high culture’ events, but also on more informal street festival, popular music and youth culture events (Florida, 2002; Romein and Trip, 2010). They contribute to a creative consumption milieu, and when they are a podium for expression of creativity and a meeting place for local creative entrepreneurs, these events also contribute to the creative production milieu.

Spatial of physical place qualities on the scale of the city (or even on larger scales) are qualities as concentrations of creative businesses, the accessibility by car, train and plain, diversity in housing types, inexpensive housing, cheap and spacious working places for examples in old buildings and incubators.

Amenities and services that support creative industries and households are relevant on the scale of the neighbourhoods. But amenities that appeal to creative people in general are more relevant on an urban or regional scale, especially when considering that many people work, live and recreate in different cities (Romein and Trip, 2010). ‘Third spaces’ can be found on all scales, varying from local establishments to urban venues and festivals.

Conclusions: planning, design and development of creative qualities of place

Literature on creative industries does not give complete and directly useful toolbox of spatial criteria to implement creative industries and creative class in the built environment by urban planning

and design. Literature on local economic activity in general and on the development of lively and vital neighbourhoods gives a more concise description of these criteria, of which many are related to the place qualities mentioned earlier on such as diversity, networks, ‘third spaces’, ‘buzz’ and liveliness. Often the place qualities of creative environments are difficult to grasp and difficult to steer by means of physical interventions.

Based on their preference of proximity and because the fact that proximity reinforces their activity and success, creative industries tend to cluster (Montgomery, 2005; Manshanden and Jonkhoof, 2005; Romein and Trip, 2010). Spatial interventions related to the development of a creative base for social-economic regeneration of neighbourhoods, mainly relate to the creation of clusters of creative industries that pay a cultural, social or economic contribution to residents and the local community as a whole. This contribution can be formed for example by the organisation of local events, the provision of education and training and the creation of local job opportunities. In order to create a creative environment that attracts creative entrepreneurs and other creative people, certain place qualities have to be present in the area (Florida, 2002; Trip and Romein, 2010). These place qualities have been mentioned in this paragraph. Of these qualities some can be developed, planned and designed, others are difficult to plan nor by planners and designers, nor by policy-makers.

The place qualities that policy-makers, urban planners and designers could put into practice are: the availability of good and affordable working spaces (e.g. business incubators) and housing; the availability of social and cultural amenities (e.g. schools, child day care, sports, etc.); a research and education infrastructure (a quality that needs to be present on the larger urban or regional scale); diversity and density of the built environment; ‘quality architecture’; combined working-living spaces; and the development of space for face-to-face contact either in the form of public or semi-public buildings or in the form public outdoor spaces. Another important aspect in creative city planning is mentioned by Verschoor (2009). According to her, creative industries contribute most to neighbourhood regeneration by interaction. Therefore, creative entrepreneurs and artists have to be visible in order to become know in the neighbourhood. A central location such as a square or main street is the most suitable location for creative activity to achieve interaction between creatives and inhabitants.

Other place qualities have to be taken into account

when planning these spatial qualities. First of all these strategic interventions should be geared on the development of concentration of creative businesses in clusters. Secondly amenities, which are less easy to plan such as attractive shops and catering facilities, and that appeal to creatives, should be taken into account in planning and development policies on creative industries. Close proximity is in this case not always a primary condition, but the creative clusters should be developed within the sphere of inner cities and old historic neighbourhoods. These locations have proven to be a successful production and consumption milieu and a breeding ground for creative industries and other small entrepreneurs. Also the relation networks, the presence of 'buzz' and 'third spaces', diversity in people and jobs, a diverse labour pool, liveliness, tolerance as well as symbolic qualities can and should all be taking into account when planning, designing and developing creative industries. All of these qualities have aspects that relate to space; whether they are present and into what extend.

In case of these difficult-to plan qualities, some could perhaps be influenced. By intervening in the urban morphology, by increasing the density of built space and by rearranging streets and creating new connections, the development of 'third spaces' and relation networks could be boosted, and liveliness and 'street life' could increase. Problem neighbourhoods often deal with issues concerning tolerance and openness, and are therefore not always an ideal breeding ground for creative city development. The cause of decreased tolerance and openness in problem neighbourhoods lies partially in the demographics and social-economic situation, but can also be interpreted as the effect of segregation and isolation (Vaughan *et al.*, 2005). Opening up the neighbourhood by intervening in the urban spatial structure and the planning and designing of new spatial connections can increase liveliness, social contact, bonding and coherence and eventually create a more tolerant and open community. This tolerance and openness create both more opportunities for participation in social and cultural activities and in education and work, and contributes to a creative production and consumption milieu and the attractiveness of problem neighbourhoods for creative entrepreneurs, workers and their families (Florida, 2002)

Besides social and physical qualities, also symbolic qualities of space can be made operation in creative city planning policies in problem neighbourhoods. The exploitation of 'edginess', ethnic diversity, and the cultural heritage of problem neighbourhoods,

for example of neighbourhoods located nearby former harbours or industrial areas, should be part of urban planning, design and development. Rotterdam and Rotterdam-Zuid offer such environments.

5.8 General criteria for a vital neighbourhood economy

The success of the development of a strong and diverse economic based in neighbourhoods in order to contribute to social-economic regeneration, cannot only depend on creative industries alone. Problem neighbourhoods often already have a certain economic base, and businesses that act on the scale of the city or region, but are located within the neighbourhood can pay their contribution. This has already been assessed in this thesis.

Literature on the development of creative industries did not provide sufficient planning and design criteria. Therefore, we will now look at economic activity in a broader sense, widening the scope beyond creative industries to the local economy in general. Before spatial-physical criteria for development of the neighbourhood economy are discussed, first the five success factors of the neighbourhood economy are addressed. These five criteria are easy to influence by rather simple policies and small interventions.

There are also elements of the neighbourhood and its economy where change, especially one the short term, is less simple. Wille (2009) cites them: the existing retail supply; accommodation; accessibility; parking; the attraction of clients from other areas; routing; and image.

Affordability, visibility, quality, talented and diversity

According to professionals from housing corporations, government and market parties, there are five criteria that determine the success of a dynamic and flourishing neighbourhood economy: affordability, visibility, quality, talent and diversity (Wille, 2009). Local entrepreneurship is encouraged by the supply of affordable retail and working spaces. Affordable business space increases the willingness of people to take their chances in starting their own business and developing their talent as an entrepreneur. It also leaves open the possibility to invest in better products and services.

Secondly, economic activity needs to be visible. Visibility stimulates face-to-face contact and contributes to the development of business networks of start-ups and established companies. Also the visibility of freelancers and 'teleworkers' is impor-

tant. Visibility and a visible contribution of entrepreneurs to the social and economic climate in neighbourhoods can bring in new and more customers (Wille, 2009; Verschoor, 2009).

The supply of high quality products and services can strengthen the position of entrepreneurs in the neighbourhood. According to Wille, entrepreneurs in problem neighbourhoods are often primarily engaged in keeping their head above water, and pay limited attention to the quality they offer. Professional advice and training could contribute creating a successful business that is based on qualitative products and services.

The fourth criterion she mentions is the exploration and exploitation of local talent. Talented people are often hidden in problem neighbourhoods, but their initiatives can contribute to the vitality and liveliness of neighbourhoods. If talent is made visible it can act as an example to others. Every person has talent (Florida, 2002), but how do we find and exploit it, what can we do with it and moreover who will assist new talent?

The fifth and final factor of success is diversity. Diversity has already been mentioned many times, as is one of the key elements in developing vital and lively neighbourhoods and cities (Jacobs, 1961; Wille, 2009). Often the economic diversity in problem neighbourhoods is limited. Most common are shops that often all offer similar products; furthermore are sometimes dubious consumer and commercial services such as coffee bars, fast food restaurants and *belwinkels*, all of the same sort. Diversity in retail and services is essential in order to create attractive and vital neighbourhoods.

Vacant commercial space and other empty plinths are ideal locations for local economic development and vitality. They are cheap and visible, and offer the opportunity new talent to start a high quality business that contributes to the diversity in the neighbourhood.

According to Jane Jacobs and her book 'The economy of cities' (1969) the nature of the physical structure of the city is impetus to the urban economic innovation and the emergence of new businesses. "Consider too the physical arrangements that promote the greatest profusion of duplicate and diverse enterprises serving the population of the city, and lead therefore to the greatest opportunities for plentiful division of labour on which new work can potentially arise." (Jacobs, 1969, p.100) This conclusion is based on earlier work, namely 'The death and life of great American cities' (Jacobs, 1961). In this book Jacobs provides a list of success factors that contribute to economic

development. These success factors are, in contrast to the previous ones, less easy to deploy, as they often ask for more radical physical interventions and planning mechanisms. Especially when they are not present; on the other hand this list does provide criteria in search for urban environments that are lively and diverse, and thus become economically vital.

In the 1960s Jacobs identified the characteristics of a vital neighbourhood economy; these characteristics are still relevant today (Franke and Hospers, 2010). The four spatial-physical criteria she provides are the basis for interaction between people, liveliness and diversity. According to Jacobs (1961), diversity is the breeding ground for the development and growth of the local economy. Also other authors quote the meaning of vitality and diversity, and follow the same path of reasoning on vitality and local economic dynamics as Jacobs (e.g. Montgomery, 2007b; Boonstra and Roso, 2009a).

Vitality is what distinguishes successful urban areas from the other. It refers to the numbers of people in and around the street (pedestrian flows) across different times of the day and night, uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, successful places appear to have their own pulse of rhythm, a life force or élan vital. (Montgomery, 2007b).

Multi-functional, old-and-new, well-integrated and concentrated

Diversity in neighbourhoods can be obtained by means of for spatial-physical criteria. (1) mixing of functions; (2) diversity in real estate; (3) infrastructural connections; (4) and concentration versus decentralisation. In short, Jane Jacobs cite the following conditions:

Condition 1: The district, and indeed as many of its internal parts as possible, must serve more than one primary function; preferable more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use as many facilities in common. (Jacobs, 1961, p.152)

Condition 2: Most blocks must be short; that is, streets and opportunities to turn corners must be frequent. (Idem, p.178)

Condition 3: The district must mingle buildings that vary in age and condition, including a good proportion of old ones. (Idem, p.187)

Condition 4: The district must have a sufficiently dense concentration of people, for whatever purpose

they may be there. This includes people there because of residence. (Idem, p.200)

According to Jacobs (1961), living and working are the two main functions of a neighbourhood. For a neighbourhood to be diverse and vital, at least these two functions have to be present. This statement follows Jacobs aversion of mono-functional zoned Modernist neighbourhoods. The presence of dwellings and working spaces, creates constant street life, especially in combination with other functions such as shopping, leisure and recreation. Multi-functional neighbourhoods also stimulate unplanned encounters and attract visitor from outside the neighbourhood. Variety in functions brings in different kinds of people. They come at different times of the day, working in different schedules, coming to the same place for different purposes. According to Boonstra and Roso (2008), the combination of living and working creates a local market, people live, work and consume in the same spot, as for example 'teleworkers' do.

The diversity brought forward by functional mixing is not the only type of mixed use diversity, also diversity among enterprises and services (e.g. specialised shops and services) is a form of diversity that contributes vitality (Jacobs, 1961). A wide variety of functions often comes with a wide variety of 'third spaces', which stimulate face-to-face contact, in important factor in economic success (Florida, 2002).

Secondly, a mix of buildings, old and new, well and not-so-well maintained, attracts a different groups of residents and entrepreneurs to a neighbourhood. "Old ideas can sometimes use new buildings. New ideas must use old buildings." (Jacobs, 1961, p.188) Diversity in real estate contributes to diversity in amenities and diversity in life styles and consumer needs. This diversity also contributes to the growth and development opportunities of enterprises. Also the adaptability of business space (Montgomery, 2007b) and the availability of flexible working places for creative, as well as for immigrant entrepreneurs (Kloosterman and Van der Leun, 1999) and small business spaces in plinths (Poppegaai and Kloosterman, 2010) are related to this issue. Also the business space for growing and successful entrepreneurs that look for new business opportunities and larger spaces within the neighbourhood need to be provided to retain social climbers; this also counts for the provision of residences for social climbers among creatives and immigrants.

According to Jacobs (1961), the streets are the

prime place for social encounters. They provide open space to the public to meet, as well as a place for shop-owners and other entrepreneurs to locate their shops, bars and restaurants. The third factor mentioned by Jacobs is infrastructural connections. This is a fairly wide conception, and related to the morphology of the city. Small building blocks and a finely-grained street pattern creates an urban spatial-physical network that contributes to liveliness and stimulates local economic development. Small entrepreneurs largely depend on face-to-face contacts with clients, customers and suppliers, and also encounters with colleagues and competitors (Montgomery, 2007b). Fine grain urban networks result in liveliness, thus vitality (Jacobs, 1961). Permeability of urban blocks and the presence of multiple routes that residents, workers and visitors are able to take, results in the creation of multiple nodes in the urban network where economic activity can take place. "Particularising places and concentration of traffic flows create local orientation points, this way entrepreneurs gain visibility and accessibility." (Boonstra and Roso, 2009a, p.34) The research of Boonstra and Roso has proven that the degree of accessibility has a positive influence on the support for local economic activity, but also the character of the place itself contributes to economic vitality. But, according to Boonstra and Roso, it is not necessarily the neighbourhoods with a finely-grained network of streets, but the presence of certain routes that create economic vitality. Their results are based on the fact that areas with clear neighbourhood routing, with continuous streets that connect neighbourhoods with their urban and regional environment, as well as neighbourhood with a 'labyrinth' structure show growth of jobs. In addition they state, that not only local connections within and between adjacent neighbourhoods contribute to liveliness and economic vitality, also good connections with other parts of the city, the region and the (inter)national network contribute to employment growth.

This criterion can also be regarded as a form of diversity, namely of street patterns and routes. Moreover, according to Montgomery (2007b) urban blocks should preferably not exceed 90 x 90 metres. Other aspects related to urban morphology that Jacobs (1961) cites are: streets that encourage contact; visibility ('eyes on the street'); and horizontal grain or horizontal zoning meaning that public and semi-public functions are preferably placed next to each other, instead of being stacked.

The fourth and final factor in local economic vitality is the rate of concentration or spacing of people

in public space. The balance in the distribution of people is needed, in order to provide a basis for economic development and amenities, and to prevent nuisance and overcrowding. Concentration of amenities brings results in concentration of supply and demand of products and services; this economic concentration improves efficiency and productivity of the local economy (Manshanden and Jonkhoff, 2005; Boonstra and Roso, 2009a). On the other hand, Boonstra and Roso say, that insufficient amount of public places increases the pressure on urban space and limits the positive effect of concentration on the success of entrepreneurship; high densities also reduce the space for expansion of economic activity.

As already has been stated earlier, small-scale entrepreneurs bring quality and liveliness into neighbourhoods and are an instrument in urban regeneration (Boonstra, 2008). A wide range of spatial and physical factors influences the economic dynamics of neighbourhoods, according to different thinkers and researchers. But, in what extend are these factors real and measurable criteria in the growth of the local economy and employment? A research by TNO concludes that economic development and growth of employment is especially strong in mixed neighbourhoods with small-scale companies (Boonstra and Roso, 2009a). This type of neighbourhood is common among problem neighbourhoods in large cities, which are often characterised by a medium buildings density, a mix of functions, a varied street pattern and good accessibility to urban, regional and national networks.

In the report of Boonstra and Roso a number of subjects is given that should be part in planning and designing strategies on social-economic regeneration in problem neighbourhoods, such as Rotterdam-Zuid. These are the issues the report brings forward related to urban planning, design and architecture:

- » mixing of functions;
- » investments in small-scale entrepreneurs and housing plans for growing businesses;
- » providing spaces for large-scale projects and investments;
- » improving accessibility and external connections in case they are weak;
- » providing clear neighbourhood routing;
- » investments in spatial quality and public spaces;
- » involving urban spatial, social and economic strategies.

To this, Boonstra and Roso (2008) add, that be-

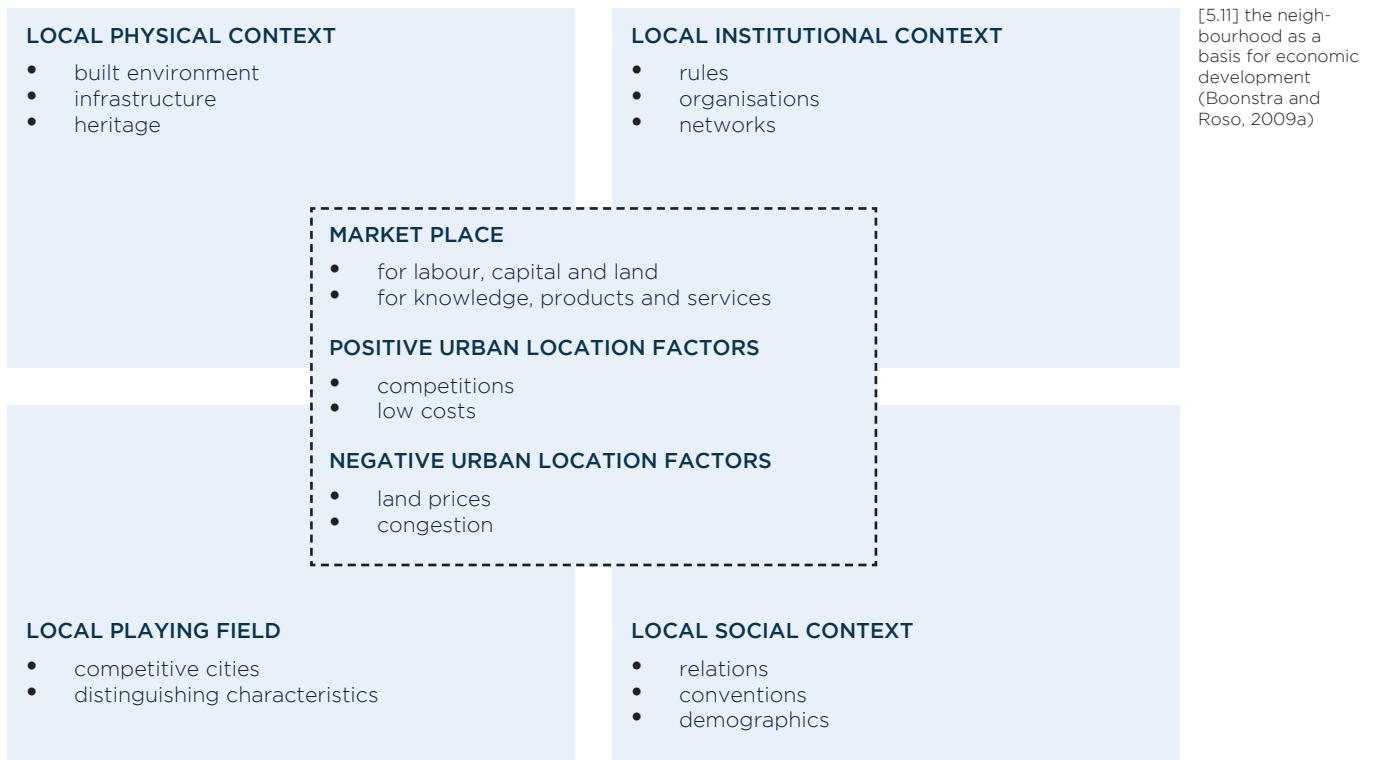
sides local inventions based on these issues, also the type of urban governance has its influence on the success of urban regeneration through local economic development. Changing or adapting the social. Economic and physical structure alone is not enough. Also local and national governments should pay their contribution for example by adjusting policy and rules and providing financial support, skills and knowledge (e.g. *kansenzones*, education, local business support centres).

5.9 The economy, urban regeneration and the city as a whole

Investments and the right policies neighbourhood economy in urban regeneration, do not only contribute to a strong and integral solution to local social-economic problems. The exploitation of talent in cities, in order to create a large and well-qualified labour market, is one of the success factors in the urban and national economy (Stob *et al.*, 2010) [5.11]. The neighbourhood, where lots of undiscovered talents are located, forms the basis for urban economic development. The neighbourhood also functions as a market place for the economy; its built environment, its networks, its social construct, and its distinctiveness contribute to the economic success and competitive power of the city (Boonstra and Roso, 2009a).

But not only the exploitation of local talent, also the attraction of external talent, such as creative entrepreneurs and innovative knowledge workers, and the development of a skilful labour force contribute to economic development on the scale of the city. The success of urban economic development is partially rooted in local dynamics and characteristics.

Besides the improvement of quality of life, interventions in the built environment, in for example problem neighbourhoods, that create diversity, liveliness and dynamics that contribute to local economic vitality, and investments that help and encourage people to actively be involved in the economy, also the development of a knowledge basis is mentioned as an important factor in urban economic development and competitiveness. The development of a strong knowledge economy, is part of the architectural design project, is mentioned here, as it should be an integral part of tackling urban economic development. Besides a strategy and urban design plan, the graduation project of which this thesis is one part, also includes the design of a building. The author has – prior to this urban research and design project – designed a building that combines different programs geared



on social-economic reintegration of youth and other residents. This multifunctional ‘hybrid’ building houses a vocational school, workings spaces for starting and growing entrepreneurs, a library, employment centre, multifunctional neighbourhoods centre, a large auditorium and public podium, and facilities as a restaurant, café, child day care centre, as well as space for some small shops. More information on this architectural project can be found in chapter 8 and the appendix.

Knowledge is one of the foundations of economic development, and cities are becoming increasingly interested in knowledge related urban economies (Lambooy, 1993; Storper, 1997; Hall, 1998 in: Trip, 2007b). “It is believed that Europe should speed up its transition towards a ‘knowledge-based economy’ in order to match the growth of the USA and emerging Asian countries.” (Van Winden *et al.*, 2007, p.252) The authors say that EU governments should increase their expenditures in research and development (R&D) and education, promote commercialisation of research and innovation and invest in ICT. This is so, because the positive growth between economic productivity growth and investments in R&D and education has been proven to be strong (Van Winden *et al.*, 2007). The creative industry is a sector that, seen their way of working and producing products and services, clearly corresponds with this type of economic policy.

Van Winden and his co-authors formulated four

‘pillars’ on which the knowledge economy of cities is based.

- » “An economic and institutional regime that provides incentives for the efficient use of existing knowledge, the creation of knowledge and entrepreneurship;
- » an educated and skilled population that can create and use knowledge;
- » a dynamic information infrastructure that can facilitate the effective communication, dissemination and processing of information;
- » a system of research centres, university, think-tanks, consultants, firms and other organisations that can tap into the growing stock of global knowledge, assimilate and adapt it to local needs and create new local knowledge.” (2007, p.528)

Thus, cities should focus their policy on these four pillars, among of course other elements such as quality of life and the development of the neighbourhood economy. One of the knowledge-intensive sectors mentioned by Van Winden (*et al.*, 2007) is the creative industry. As already has been said, this industry can be a strong factor in the regeneration of both cities and their neighbourhoods.

Another aspect that is frequently mentioned by researchers, but also not addressed as one of the prime issues of this thesis, is the housing market. In many Dutch cities there is an imbalance between the housing market and the employment

market. Cities, especially the ones that deal with a lack of economic vitality and social-economic problems among their population, such as Rotterdam, consist for a large part out of lower class housing areas. This goes hand in hand with a large percentage of low-educated and low-income, or even unemployed inhabitants. This, while highly educated people often live outside these cities or in affluent suburbs, which results in strong social-economic segregation and a relative low quality of life. Balance can be restored by “creating more low-skilled employment opportunities and more high-value housing opportunities” (Priemus and Van Kempen, 1999, p.409). Furthermore, urban restructuring can help improving the quality of life in cities, which consequently has a positive effect on the competitiveness of cities (Begg, 1999; Priemus and Van Kempen, 1999; Van Winden *et al.*, 2007).

5.10 Conclusions: criteria for local economy-based urban regeneration

The aim of the project is the regeneration of problem neighbourhoods in Rotterdam-Zuid, and the improvement of the social-economic conditions of its inhabitants. The means that are provided to achieve these goals are researched, described and discussed in this chapter. The local actors that should contribute to local regeneration are the local entrepreneurs. But the diversity and quality of the local businesses is limited, and the opportunities they provide for training, internships and talent development a scarce. Creative entrepreneurs are part of the neighbourhood economy, but are at the moment rarely present, and if they are they lack visibility.

Both can contribute to the urban regeneration of Rotterdam-Zuid. Improving diversity and quality among local entrepreneurs and the attraction of new entrepreneurs, such as creative entrepreneurs and artists, can contribute to the enlargement of opportunities of talent development. In order to achieve this, investments in the social-cultural, economic and spatial-physical environment are needed. The amelioration of the local environment also improves and creates new employment (more jobs) and entrepreneurship opportunities for the residents of problem neighbourhoods. In addition the attraction of new groups of residents (students, creatives, middle class) is stimulated by these investments, as well as the retention of social climbers, both residents and entrepreneurs.

Revitalise, strengthen and diversity the neighbourhood economy, invest in and create new cultural,

social and commercial amenities as well as services that support entrepreneurs. Improve the spatial-physical quality of the neighbourhood, invest in public space and boost the development of ‘third spaces’; this way a creative production and consumption milieu is created. Mixed functionality, diversity in real estate, local routing, and density, these are all spatial-physical aspects that contribute to the development of a diverse and lively neighbourhoods and thus to a vital neighbourhood economy. An environment is shaped where local creative talent can be discovered, developed and exploited.

The list of criteria, whether aimed on creatives or locals, physical and non-physical, controlled or ‘organic’, is long and diverse. Not all criteria give lead for direct planning and design, some are unpredictable and difficult to steer. Some asks for new policies, multi-actor approach and heavy investments. Some criteria are preconditions to success, while some can be planned, developed and designed. The following list provides an overview of the most important criteria. A complete overview is presented in tables [5.12].

- » Increase local economic vitality.
- » Provide affordable and diverse working and living space.
- » Create entrepreneurship opportunities.
- » Create new job opportunities.
- » Retain social climbers.
- » Attract creatives.
- » Involve local entrepreneurs in community projects.
- » Provide a podium for undiscovered talent.
- » Add new facilities for education, training and internship.
- » Create liveliness and overall diversity.
- » Improve local (local routes) and urban (public transport) accessibility.
- » Create places where residents and entrepreneurs can meet one another.

The first question that was asked in this thesis was: can creative industries or local entrepreneurs in general, contribute to social-economic regeneration? Yes they can, but in order to attract creative industries to problem neighbourhoods a creative production and consumption milieu has to be created. A new question that arose in this chapter was: can this milieu be created in urban problem neighbourhoods in Rotterdam-Zuid? It is possible, but it takes a lot of effort. In addition, the research on creative industries and the development of a creative milieu did not provide a lot of useful

criteria for urban planners and designers. It did give direction to policies on creative city development, but not so much on the local scale. When researching criteria for the development of a vital neighbourhood economy, in which creative industries form a sector, more spatial-physical planning and design tools were provided. So, does a strategy based on spatial-physical interventions that aims on the development of the neighbourhood and the local economy, also contribute to the creation of a creative production and consumption milieu? Yes, it does. Many links can be found between criteria for the development of a vital neighbourhood economy and the development of a creative environment. The most important place qualities of the creative environment are being covered by these criteria. A summary of the most important criteria are:

Physical-spatial criteria

- » Mixed functions: at least living and working with addition of shopping, leisure, recreation
- » Diversity in real estate: age, maintenance, size, price
- » Infrastructural connections: local routes and nodes, access to the upscale networks
- » Density: concentration of activity, and prevent nuisance and overcrowding
- » Public space and ‘third spaces’: visibility, face-to-face contact, exchange

Social-cultural criteria

- » Diversity in cultures, ages, lifestyles and identities increase dynamics and vitality
- » Consumer-oriented development: strategies based on attraction and retention of different groups of people
- » Creativity and economy strengthen each other: encounters, inspiration, exchange, innovation, competition

Economic criteria

- » Business climate: markets, real estate prices
- » Internal and external visibility: network of entrepreneurs, and network of customers and clients
- » Quality of business real estate, products, services, and business training and support
- » Talent, creativity and craftsmanship: talent development and role models
- » Harmonise supply and demand: differentiation, flexibility, branching

ferent parties. Housing corporations should invest in their real estate and the neighbourhoods and facilitate entrepreneurs. The municipal government should provide policies, rules and (financial) support, for example in form of *kansenzones*. Schools and other educational institutions should provide a link between education and employment, provide continuous learning trajectories, and actively develop talent. Also entrepreneurs should contribute to talent development, invest a higher quality of real estate, products and services, develop their business networks, and initiate and carry out neighbourhood projects and events.

In order to meet these criteria, urban development strategies should include the efforts of many dif-

[5.12] criteria for a vital and creative neighbourhood economy as defined by the author

ECONOMIC CRITERIA	<p>LOCAL RESIDENTS AND ENTREPRENEURS</p> <ul style="list-style-type: none"> • more jobs • discover, develop and exploit new talent • environments to discover and develop talent (e.g. local events, multifunctional neighbourhood centres, schools, creative podiums) • appropriate space for successful and growing businesses • strengthen existing businesses and eliminate the undesirable ones (e.g. belhuizen) • improve the situation of immigrant entrepreneurs • link education and training to the demand of the labour market; for both high-skilled (health care and high tech) and low-skilled labour (e.g. horticulture and construction) • visibility of entrepreneurs 	<p>NEW CREATIVES</p> <ul style="list-style-type: none"> • neighbourhood promotion • attract fresh talent (e.g. students and starters) • attract more high-quality amenities • invest in the knowledge, research and education infrastructure • affordable and suitable working (and living) spaces for creative entrepreneurs, artists and other creatives • business incubators for creative entrepreneurs • environments for inspiration and transaction: creative workplaces and transaction milieus • development of creative clusters • also look beyond the creative clusters as creative also tend to settle in other environments but close to a creative milieu • proximity and accessibility of a high-quality creative environment
	<ul style="list-style-type: none"> • policies and strategies on local economic development should regard the existing economic context (e.g. associated companies and sectors) • local entrepreneurship opportunities for new businesses • assistance for start-ups and small entrepreneurs • financial benefits for entrepreneurs (e.g. kansenzones) • space for large-scale projects and investments • diversity in shops, services and other businesses • quality improvement of commercial real estate, products and services • combined living-working spaces • amenities (e.g. meeting rooms, ateliers, exhibition spaces) and services (e.g. business support, secretarial support, media and communication) that support small entrepreneurs and starters • development of places where entrepreneurs can meet and exchange knowledge, ideas and orders and expand their business networks (e.g. 'third spaces') • liveable neighbourhoods, they are better able to retain businesses 	

SOCIAL-CULTURAL CRITERIA	<p>LOCAL RESIDENTS AND ENTREPRENEURS</p> <ul style="list-style-type: none"> • self-confidence and self-awareness among residents • education, training and development of skills • neighbourhood centres with libraries and meeting rooms for workshops and training • retain social climbers 	<p>NEW CREATIVES</p> <ul style="list-style-type: none"> • affordable housing for creatives (e.g. klushuizen) • high-quality amenities (e.g. shops, restaurants, cafés, markets) • high culture (e.g. theatres, museums) and low culture (e.g. sports, recreation, events) • proximity and accessibility of a high-quality creative environment • distinctive and authentic local cultural and social profile; exploit the 'DNA' of a place
	<ul style="list-style-type: none"> • policies and strategies should regard the existing social-cultural context • improve the internal and external image of problem neighbourhoods • lively neighbourhoods and stimulate street life • liveable neighbourhoods • counteract segregation and polarisation • a tolerant and open local and urban community • create an atmosphere that stimulates participation • diversity on the housing market, by building dwellings for the middle class in order to retain 	

- social climbers
- a wide variety of amenities and businesses
- local cultural, musical and artistic events
- child day care and create high-quality schools
- places where residents can meet and exchange thoughts, experiences and knowledge and expand their social networks
- give creative entrepreneurs and artists a place in communities that can benefit from their presence
- stimulate social involvement of the creative industry and other local businesses in social or cultural projects, training and art projects

SPATIAL-PHYSICAL CRITERIA	<p>LOCAL RESIDENTS AND ENTREPRENEURS</p> <ul style="list-style-type: none"> • accessibility (by means of transport) of the wider urban labour market 	<p>NEW CREATIVES</p> <ul style="list-style-type: none"> • develop former industrial and business areas, and other un(der)developed urban areas • mixed urban environments; start-ups, freelancers, creative workers and small-scale local entrepreneurs prefer to live, work and recreate in the same area • concentrations of creative entrepreneurs, artists and other creatives • exploit built heritage and invest in historic neighbourhoods and urban structures
	<ul style="list-style-type: none"> • improve the living environment • functional mix of at least working and living in order to create day-long liveliness • addition of even more functions (e.g. shopping, leisure, recreation) • diversity in residential and commercial real estate: old and new, well and not-so-well maintained, offering small and large, shared (e.g. incubators) and private, flexible and mixed (e.g. combining living and working space) • reduce vacancy of commercial space and fill in empty plinths, they are ideal, cheap and visible location for new business opportunities • affordable and visible business spaces for freelancers, creative entrepreneurs, artists, retailers, and other small-scale businesses • finely-grained morphology of small urban blocks and streets that form distinct routes; create a high urban permeability but with clear routing • size of urban blocks should rarely exceed 90 x 90 metres • access to urban, regional and national networks • multiple and diverse, pleasant and safe, and clear slow traffic routes • spatial quality and public spaces • public and semi-public spaces that stimulate face-to-face contact between residents, entrepreneurs and between on another • particularise certain places and create concentrations of traffic flows, they form orientation points and provide a visible and accessible location for entrepreneurs • concentrations of people in the street but prevent overcrowding 	

Urban analysis: mapping S.W.O.T.

ANALYSIS - CHAPTER 6





The Parkstad area in 2011 (authors's own)

Urban analysis: mapping S.W.O.T.

This chapter provides a thorough analysis of the social, economic and physical environment of the four problem neighbourhoods of Rotterdam-Zuid: Feijenoord, Afrikaanderwijk, Hillesluis and Bloemhof. But not only the local context, including an analysis of the project area of Parkstad and its surroundings, but also the context of these problem neighbourhoods will be described: Rotterdam-Zuid and the city as a whole. The analysis aims at a clear understanding how the criteria, described in the previous chapter, relate to the specific local and urban context.

First the local economy will be analysed and described, followed by an overview of the creative sector of Rotterdam. This in order to discover the local lead for economic development and urban regeneration based on the attraction of new (creative) entrepreneurs and the development of local talent.

Thereafter, an overview is provided of the social-economic and physical problems these four neighbourhoods are dealing with, but also the chances they possess, based upon spatial-physical urban analysis. Social-economic problems do not always have clear spatial characteristics, but in order to provide a successful strategy on urban regeneration, the spatial aspects of these problems have to be mapped. Also the project location itself will be subjected to urban analysis.

The third section of this chapter researches the embedding of the project area in Rotterdam-Zuid, and of Rotterdam-Zuid in the city. This section analyses the physical aspects (accessibility, routing) of these areas within the larger context.

The research area of the analysis is formed by the following neighbourhoods: Feijenoord, Kop van

[6.1] research area (1) and project area (2) in Rotterdam-Zuid



Zuid-Entrepot, Kop van Zuid, Afrikaanderwijk, Bloemhof, Hillesluis, as well as a part of the neighbourhood Oud-IJselmonde, namely Stadionpark/De Veranda. In some cases, for example when researching the urban context, the research area is extended to Rotterdam-Zuid or the agglomeration of Rotterdam. The project area is formed by Parkstad, Maaszicht and the adjacent areas of other neighbourhoods.

This chapter is concluded with an overview of the criteria for local (creative) economy-based development. The current situation in Rotterdam-Zuid, which is analysed in this chapter, is assessed based on these criteria in a SWOT analysis. The SWOT analysis is assessed in a confrontation matrix; strengths, weaknesses, opportunities and threats can be translated into a list of interventions and policies, which form the basis to the proposed urban regeneration strategy for Rotterdam-Zuid: social-economic reintegration through an urban regeneration strategy based on the development of local creative talent and a vital neighbourhood economy.

6.1 The economy of Rotterdam-Zuid

In order to get a clear image of the functional and

physical structure of the neighbourhood economy, all visible economic activity in the research area is mapped based on empirical research [6.4 & 6.5]. In the analysis of the neighbourhood economy, four types of economic activity have been defined. These are types or sectors are: retail, consumer services, commercial services and cultural industry. A fifth sector is added, social services. In this part of Rotterdam-Zuid, retail forms the major sector of the local economy, 43 percent of the total volume of used business accommodations. Consumer services account for 31.3 percent and commercial services for 21.6 percent of the accommodation. The cultural sector is very small (3.1%). But when we would take the invisible economic activity into account, located in dwellings (i.e. teleworking), shared office buildings and business incubators, the share of cultural industry, as well as commercial services would most certainly increase. When we include social services into this comparison, 16.1 percent of the accommodations are used by social services, consequently, the share of economic business would decrease.

Of the total stock of (non-shared) accommodations for business and social services (1197 places), 7.4% is either for rent or unused. A complete overview of the figures on the businesses in Kop

van Zuid, Feijenoord, Afrikaanderwijk, Hillesluis, Bloemhof and Stadionpark can be found in the appendix.

Visible economic activity in Feijenoord

Most of the economic activity in this part of Rotterdam-Zuid takes place along Boulevard Zuid [6.6], which consists out of two parts: Beijerlandse laan (the northern part) and the Groene Hilledijk (the southern part). Almost the complete areal of ground floors in this street is occupied by businesses. Out of 400 businesses specialized in retail in the area, 160 (i.e. 40%) are located along this street and its environs. Boulevard Zuid is a typical shopping street, with a wide variety of shops from chain stores, which are mostly located in recently built buildings in the central part of the Beijerlandse laan, to shops of local independent entrepreneurs. The offer ranges from supermarkets and other grocery stores, clothing stores and jewellers, to shops for household goods, pharmacies, gift shops and small furniture shops. Besides shops, also consumer services (e.g. restaurants, cafés, coffee shops, takeaways, hairdressers) and some commercial services (e.g. employment agencies, telephone offices, money transfer offices). 22 percent of the consumer services and 15.7 percent of the commercial services in the area are located along Boulevard Zuid.

When we speak about visible economic activity, dominant in the complete research are retail (36.1%) and consumer services (26.2%), and in lesser extend commercial services (18.1%) and social services (16.1%). The number of cultural industry-related businesses in Rotterdam-Zuid is very limited (2.6%). Compared to other areas with a high density of small-scale businesses such as the city centre of Rotterdam or Zuidplein, the area has relatively few chain stores. Many shops and services are run by entrepreneurs with a foreign ethnic background. Most shops and services provide the daily demand of food products. Other shops and services that distinguish by their presence are: jewellers, gift shops, shops for small electronics, shops for household goods, textiles and furniture (e.g. mattresses), bridal shops, takeaway's, hairdressers, telephone offices, money transfer offices, travel agencies, businesses for second hand goods and repair and do-it-yourself shops. The migrant community is perceptible through the many ethnic shops, cafés, restaurants, takeaway's (kebab en Surinamese sandwiches), hairdressers and salons and telephone offices. Also remarkable are the shops that sell a wide array of random stuff, from food products to furniture. Many of these shops offer foreign



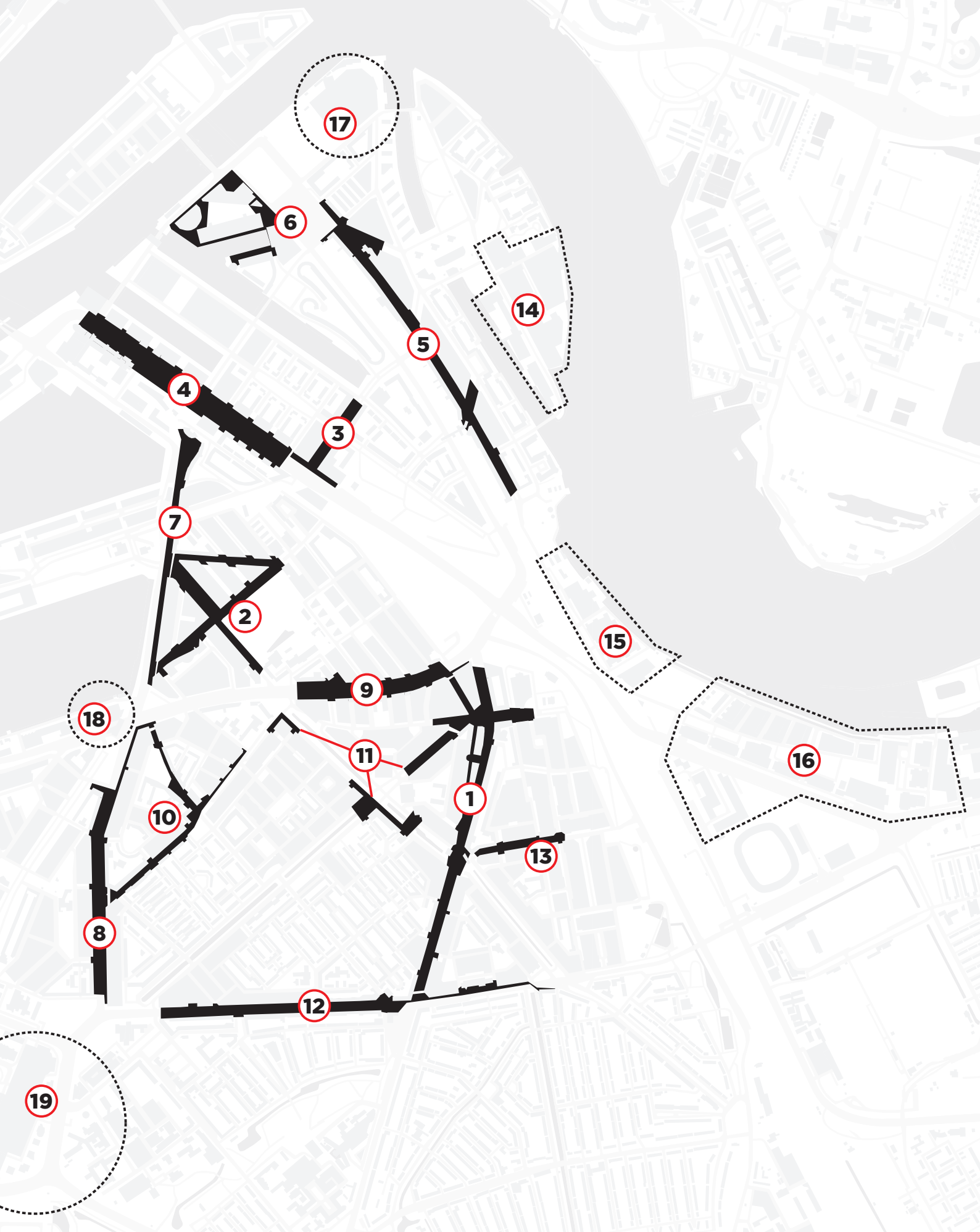
[6.2] Boulevard Zuid (skyscraper-city, 2013)
[6.3] Pretoriaaan and Afrikaandermarkt (author's own)



products (Turkish, Moroccan, Arab, Surinamese, Chinese, Polish, African, Cape Verdean, etc.) are run by immigrants, and are sometimes temporary business establishments.

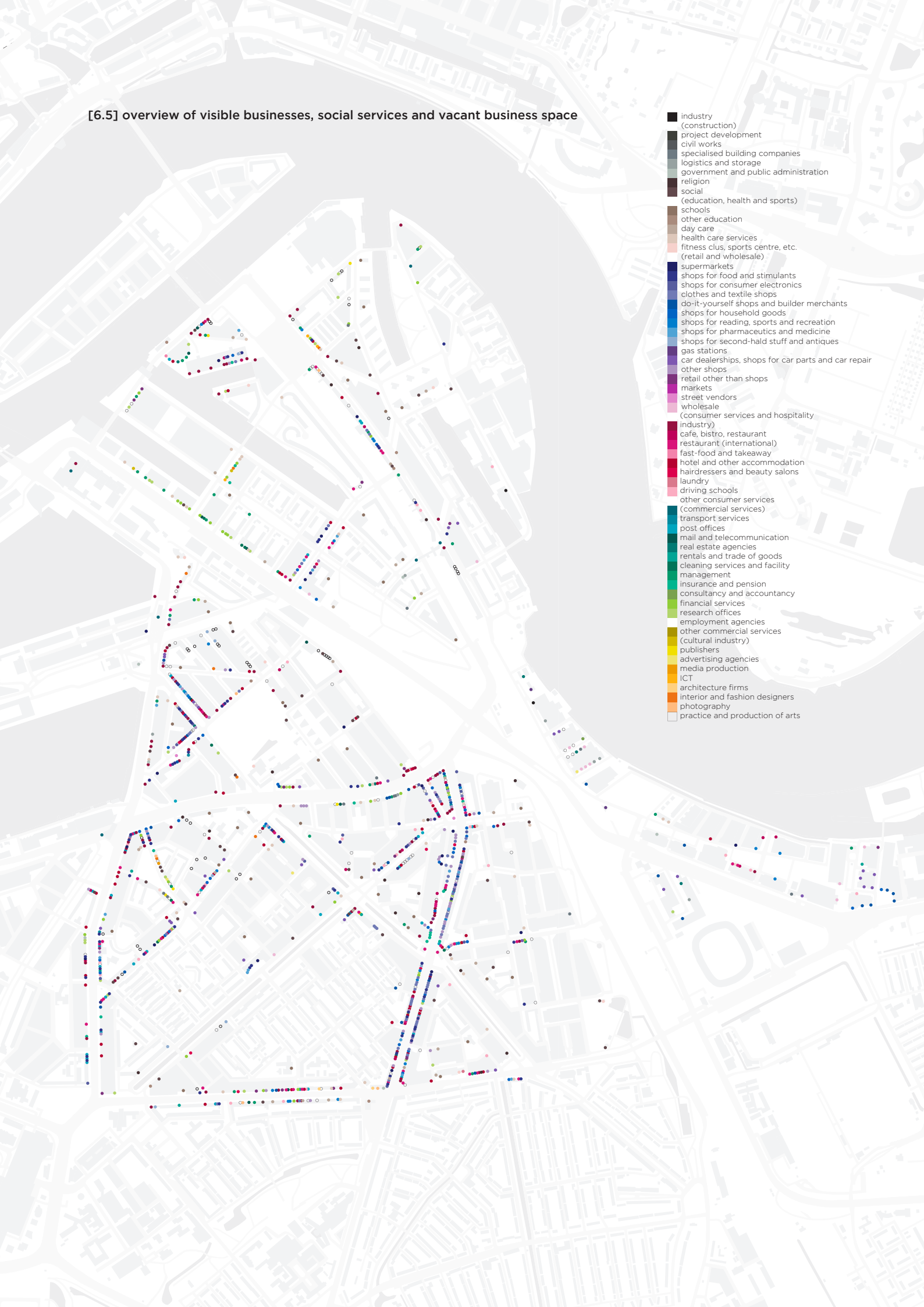
As already has been said, the highest density of visible small-scale commercial businesses is located along Boulevard Zuid. Of all commercial businesses in this part of Rotterdam-Zuid (e.g. retail, consumer and commercial services, and cultural industry), 27.6 percent is located along Boulevard Zuid. The second-highest density of economic activity is located in the streets around Afrikaanderplein (8.9%) [6.3]. In these two areas retail and consumer services are overrepresented. Around half of the businesses provide retail functions, and around one quarter provides consumer services. Other important commercial areas, that provide between accommodate between 5 and 10 percent of the business in the area are Dordtselaan and Bloemhof-Noord, as well as Strevelsweg-Bree and Putselaan. In these areas there is a bigger balance between retail, consumer and commercial services. Smaller concentrations of businesses are located in the neighbourhoods of Feijenoord and Kop van Zuid to the north: Vuurplaat, Oranjeboomstraat, Entrepot and Laan op Zuid.

[6.4] the different economic cluster that have been defined by the author



[6.5] overview of visible businesses, social services and vacant business space

- industry
- (construction)
- project development
- civil works
- specialised building companies
- logistics and storage
- government and public administration
- religion
- social
- (education, health and sports)
- schools
- other education
- day care
- health care services
- fitness club, sports centre, etc.
- (retail and wholesale)
- supermarkets
- shops for food and stimulants
- shops for consumer electronics
- clothes and textile shops
- do-it-yourself shops and builder merchants
- shops for household goods
- shops for reading, sports and recreation
- shops for pharmaceuticals and medicine
- shops for second-hand stuff and antiques
- gas stations
- car dealerships, shops for car parts and car repair
- other shops
- retail other than shops
- markets
- street vendors
- wholesale
- (consumer services and hospitality)
- industry)
- cafe, bistro, restaurant
- restaurant (international)
- fast-food and takeaway
- hotel and other accommodation
- hairdressers and beauty salons
- laundry
- driving schools
- other consumer services
- (commercial services)
- transport services
- post offices
- mail and telecommunication
- real estate agencies
- rentals and trade of goods
- cleaning services and facility management
- insurance and pension
- consultancy and accountancy
- financial services
- research offices
- employment agencies
- other commercial services
- (cultural industry)
- publishers
- advertising agencies
- media production
- ICT
- architecture firms
- interior and fashion designers
- photography
- practice and production of arts



[6.6] visible businesses and 'invisible' businesses in within building complexes



The greater part of the businesses in this part of Rotterdam-Zuid serve the area itself, we could call them local businesses with a neighbourhood function. This also counts for the social services located in the area. The large retail businesses and consumer services nearby Feijenoord Stadion and the offices (commercial services) at Kop van Zuid have much larger services area. These businesses are mainly housed inside buildings without clear plinths [6.4], and are located along one of the main routes of the city: Laan op Zuid-Stadionweg. Dordtselaan, Strevelsweg and Bree are also main roads. The amount and density of business along these streets is much smaller than along Boulevard Zuid.

Clusters and specialisation

When looking at the distribution of economic activity in the area represented by sector, certain patterns appear. Most striking is the disappearance of businesses along Laan op Zuid, when only retail is shown on the map; yet with the exception of the Vuurplaat area. The same counts for consumer services, there are for example no restaurants or hairdressers located along the northern part of Laan op Zuid. Apparently Laan op Zuid is not considered to be a good location for these kind of economic activities. Boulevard Zuid, Afrikaanderwijk and Vuurplaat are clearly retail-oriented areas. Entrepot, Oranjeboomstraat, Dordtselaan, Bloemhof-Noord, Putselaan and Strevelsweg-Bree have a less clear profile. Notable is the small cluster of shops centrally located in Bloemhof along Lange Hilleweg, which can be defined as a very small and very local shopping centre. Most shops are located along shopping streets, but in some cases shops are located within residential areas, mostly situated on street corners. This phenomenon is also visible among consumer and commercial services.

Consumer services are spread more even throughout the area, although they coincide with shopping areas in most cases. All clusters of economic activity, provide consumer services, ranging between 20 to 40 percent of the total amount businesses in the area, with the exception of Laan op Zuid. Clusters of restaurants can be found in the central part of Boulevard Zuid, on the intersection of Beijerlandse laan and Slaghekstraat, on the eastern end of Putselaan, on the intersection of Putselaan and Dordtselaan, nearby Afrikaanderplein and along Entrepothaven.

Commercial services can also be found throughout the area. They are often coincide with consumer services and retail in shopping streets, but can also be found in areas, that can less clearly be defined as

a shopping street (i.e. Oleanderplein, Laan op Zuid and Putselaan). The amount of visible business in the cultural industry is very limited. Small, but noticeable clusters are located around Oleanderplein, Lodewijk Pinscoffsweg and in the northern part of Oranjeboomstraat. Located in Rotterdam-Zuid there is a number of business incubators that offer space for creative entrepreneurs. They are situated in former neighbourhood school buildings and old industrial complexes in old harbour areas. While the economic activity is mostly clustered, such as social services such as school, health care centres, libraries, community centres, churches and mosques, are spread out equally throughout the neighbourhoods of Rotterdam-Zuid.

Quality of amenities

The offer, diversity and quality of retail, and consumer, commercial and social services is low and does not meet the needs of residents and entrepreneurs (Deelgemeente Feijenoord Rotterdam, 2010a; 2010b). The neighbourhood economy needs higher quality amenities, clustering and new amenities that meet the needs of new future residents, such as creative and middle class, as well as the needs of social climbers. The opportunities for youth to participate in sport, social and cultural activities offered by amenities are limited.

In Feijenoord the quality and amount of enterprises and other amenities in Oranjeboomstraat is insufficient. There are no clear forms of clustering or coherence of economic activity, and the street has a lack of character and identity. During the last decades, Oranjeboomstraat has lost its binding factor and function as a commercial centre for the neighbourhood [6.7]. Improvements are needed in quality, diversity and authenticity (e.g. specialised food and products).

While the situation in Oranjeboomstraat is quite problematic, the Piekstraat area, formed by the southern tip of the 'island' of Feijenoord, has become an ideal location for small industrial, commercial, creative and 'recreative' activities. Vuurplaat is the only commercial cluster in Feijenoord that provides a certain level of quality and serves not only its direct environment but the entire area of Kop van Zuid, Feijenoord and large parts of Afrikaanderwijk [6.7]. The Entrepot area provides just a few local amenities, but has with the presence of its marina the potential to become an environment for 'Food & Lifestyle' and 'Water Fun' (Deelgemeente Feijenoord Rotterdam, 2010a).

The economy of Afrikaanderwijk contributes to its identity; the neighbourhood is young, lively, mul-

[6.7] Oranjeboom-
straat (author's
own)
[6.8] Vuurplaat
(author's own)
[6.9] market at
Afrikaanderplein
(author's own)
[6.10]
Winkelboulevard
Zuid (author's own)



ticultural and enterprising. Afrikaanderplein is the focal point of the neighbourhood and provides a market two times per week that serves not only Afrikaanderwijk but also its surrounding neighbourhoods [6.9]. But there is a lack of parking facilities during market days, and the quality of products offered is low. This does not only count for the market, but also for the products and services of permanent entrepreneurs in the shopping streets Pretoriaaan and Paul Krugerstraat. Investments in high-quality shops and consumer services, especially restaurants are needed. Both real estate, and products and services should be improved, as well as the overall character of the area. The redevelopment the commercial profile of Afrikaanderwijk could extend to the borders to the neighbourhood formed by Hillelaan/Maashaven and Putselaan as well.

The Putselaan is does currently not have a clear economic profile, but the development of the street for commercial and cultural services and creative industries does have potential (Deelgemeente Feijenoord Rotterdam, 2010b).

Dordtselaan is characterised by a diverse mix of retail and commercial services. The street lacks quality and character, economic activities are scattered along the street, and concentration and clear profiling (branching) is missing. Also safety issues, vacant real estate, and the presence of undesirable businesses have a negative influence of the image of the street. The street should become more of a residential street, with small concentrations of economic activity on the corners (nodes) with Putselaan/Maashaven and Putsebocht. The economic activities, especially retail and consumer services, located along Putsebocht in Bloemhof-Noord, but also the ones located along Polderlaan and Hilleliet have limited development potential and should be cut back. Commercial and cultural services, especially of creative entrepreneurs and freelancers, and combined living-working spaces do provide potential is this type of environment.

Boulevard Zuid is by far the largest economic cluster of the four neighbourhoods [6.10]. But as a result of the construction of the shopping mall on Zuidplein it has lost its regional function (Deelgemeente Feijenoord Rotterdam, 2010b). Now this street provides retail, consumer and commercial services for its surrounding neighbourhoods, namely Bloemhof, Hillesluis, Vreewijk and part of Afrikaanderwijk. Like all shopping streets in this part of Rotterdam-Zuid also Boulevard Zuid mainly supports daily shopping needs. Most residents, four out of five, go to the city centre and

Zuidplein for non-daily shopping. This results in a limitation of diversity of goods and products. The quality of the shops and services is fairly low, and lack good character, according to Deelgemeente Feijenoord. The assignment is the development a concept that results in the attraction of new types of shops and services creating diversity. Improving the connection with Parkstad should contribute to a solution.

While the streets mentioned above can, in certain extend, be defined as a shopping street. Laan op Zuid has a totally different character. The southern part of this street is undeveloped, but the northern part accommodates many commercial services, both in plinths and office buildings. Most of the companies located along Laan op Zuid, as well as in other parts of Kop van Zuid, provide services that are employed on an urban, regional, national and international scale, but hardly on a local scale. The type of businesses located here differs complete from other businesses in Rotterdam-Zuid (e.g. law firms, large accountancy and consultancy offices, and governmental national and municipal agencies).

6.2 Creative industries in Rotterdam

Rotterdam wants to improve its image as a dynamic and inspiring city (EDBR/RRKC, 2006). Inspiring are its waters, its harbour, is urban design, but also its large yearly events, the diversity in cultures and nationalities, Museumpark, and the famous modern architects it brought forward. “Despite its disadvantages [...] Rotterdam considers creative industry crucial for a competitive post-industrial urban economy, and has elaborated creative city ambitions in recent policy initiatives.” (Romein and Trip, 2009, p.5) The improvement of the creative sector is besides the port and industry, and medical clusters, one of the spearheads of Rotterdam’s economic policy. The city has also adopted policies on the development of creative milieus (Gemeente Rotterdam, 2007a). The development of a creative milieu and the attraction of creative industries are put into action to create an environment for new businesses and new groups of residents. In 2020 the creative sector should provide 20 percent of the jobs in Rotterdam (Manshanden and Van Bree, 2010). The government policy on creative city development also mentions the creative industries as an important catalyst in the gentrification of neighbourhoods, the revitalisation of former harbour areas (Stadshavens) and the development of a livelier inner city (Gemeente Rotterdam, 2007a).

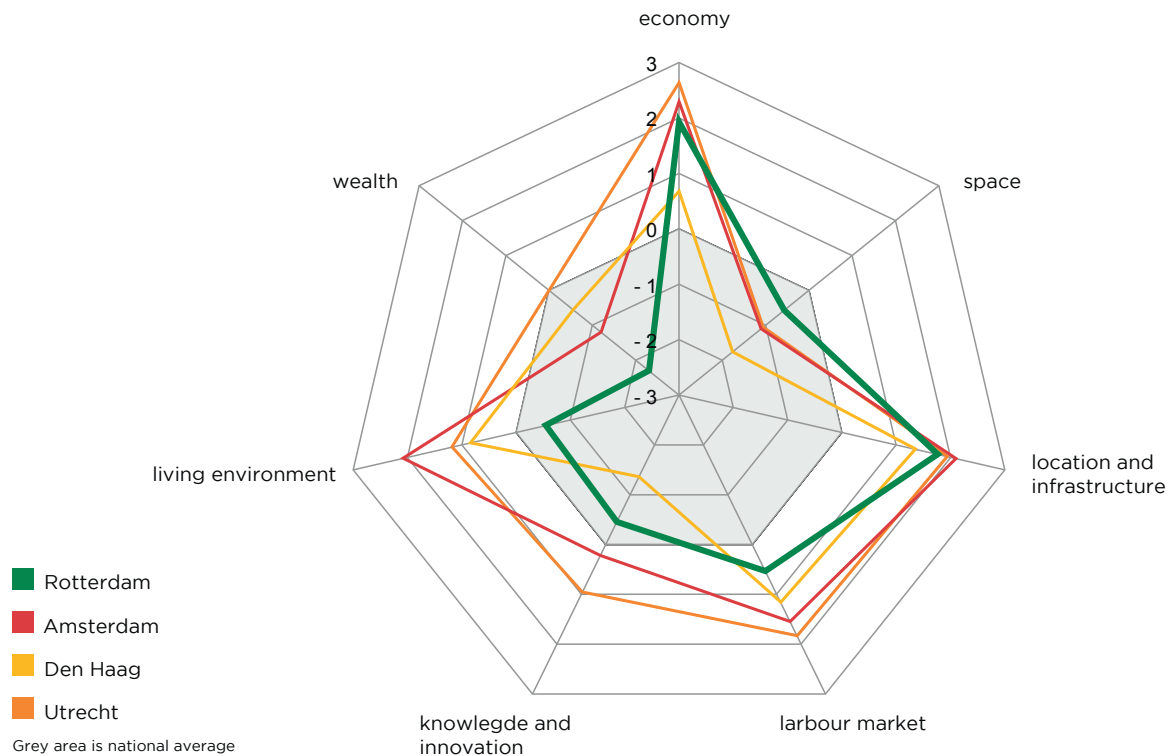
However, Rotterdam is dealing with issues that could threat or hamper the development of a strong creative milieu, especially in Rotterdam-Zuid. The city is dealing with safety and nuisance issues, and polarisation and tolerance problems among certain groups. The Modernist post-war city centre has a lack of high-quality inner city space; overall the quality of place is relatively low (Gemeente Rotterdam, 2008 in: Romein and Trip, 2009; Trip, 2007a). Compared to the other three large Dutch cities, Amsterdam, The Hague and Utrecht, the city has low scores on (1) knowledge and innovation, (2) living environment and housing, and (3) on wealth (Ontwikkelingsbedrijf Rotterdam, 2011) [6.11]. In particular the former two, can form a thread to the development of a creative milieu. Compared to Amsterdam, which is known for its vibrant creative sector, “Rotterdam lacks Amsterdam’s diversity, density and continuity and is not very enticing now people increasingly attach importance to the social and symbolic values of space” (Romein and Trip, 2009, p.10). According to Romein and Trip, the presence of an un-Dutch amount of high-rise buildings and its relatively young population do not alter this low quality. In addition also the level of education of the residents’ labour force is a nagging problem.

The city policy is aimed at both the development of creative enterprises and start-ups, and create networks between businesses and knowledge institutes and schools, and on the development of creative talents among the young population, for example in the city’s famous hip-hop scene. But a podium for local creative young talent is missing, on both the scale of the neighbourhood and the scale of the city (Romein and Trip, 2009).

Important issues to tackle in order to develop a vital creative milieu in Rotterdam are: quality of place; ‘buzz’; high-quality living environments for creatives; its ‘built software’ (e.g. public space, ‘third space’, local amenities); culture and leisure; waterfronts and street fronts; park and other green space; pedestrian routing; and architecture, cultural heritage and ‘Rotterdam themes’ in public spaces (Gemeente Rotterdam, 2008; Romein and Trip, 2009).

In general two goals are formulated by EDBR/RRKC (2006): (1) increasing the attractiveness of Rotterdam as a place to life, with an inspiring cultural climate, inviting to creative talent, and as a place for innovatie and knowledge-intensive businesses (i.e. more middle income residents and more creative entrepreneurs), and (2) increasing the performance of the creative cluster (more jobs,

[6.11] economic vitality web for the four largest Dutch cities (Ontwikkelingsbedrijf Rotterdam, 2011)



more added value) by improved dynamic interaction between (creative) entrepreneurs, (cultural) organisations, urban services and knowledge institutions.

Since the city released its vision document ‘Visie creatieve economie 2007-2010’, it concentrates its efforts on four innovative creative branches: architecture and urban design, design and product innovation, audiovisual production, and music (Gemeente Rotterdam, 2007b). The city as well as the region offer a wide variety of educational programs aimed at creative talent development, skills and knowledge (Manshanden and Van Bree, 2010). Famous examples are Berlage Institute/TU Delft and Hogeschool Rotterdam on the RDM-campus for architecture and urban design; Grafisch Lyceum and Mediacollege for graphic design, media and audiovisual production; and Willem de Koning and Artemis Stylingacademie for fashion and interior design. Also other schools (HBO, MBO, VMBO) have curricula aimed at the creative industries.

In 2011, the creative commercial businesses formed the largest sub-sector within the creative industries in Rotterdam, offering around 50 percent of the jobs. The media- and entertainment industry and the arts each contribute to about 25 percent of the total employment in the creative sector. All together they provided 4.3 percent of the total volume of jobs in the city; the sector has grown from around 3 percent in the late 1990s and early 2000s (Man-

shanden and Van Bree, 2010; Gemeente Rotterdam, 2012). Within these sub-sectors the largest branches are: architects and technical design and consultancy firms (52.5%); advertising firms in design and consultancy (11.6%); performing and creative arts (10.1%); and publishers etc. (9.4%) (Gemeente Rotterdam, 2012). Other smaller branches are: audiovisual production, cinemas, industrial design and photography, theatres and music halls, and museums and art galleries.

Most of the creative enterprises (measured in jobs) are located on the north bank of the Nieuwe Maas, especially in the city centre and the borough of Prins Alexander; smaller clusters are located in Delfshaven, Noord, and in Feijenoord and Charlois in Rotterdam-Zuid (Manshanden *et al.*, 2005). Between 1996 and 2003 the biggest employment growth in the creative industries was measured in Prins Alexander (36.6%), but also in Feijenoord the growth was substantial (12.5%). The growth of creative jobs in Feijenoord can be attributed to the number of start-ups and small enterprises (Manshanden *et al.*, 2005). Moreover, the policy of the city is mainly aimed at the development of creative milieus on the northern side of the river (Teeffelen, 2005; EDBR/RRKC, 2006; Gemeente Rotterdam, 2007a; 2007b). Although the development of local creative clusters in Rotterdam-Zuid (e.g. Creative Factory, Afrikaanderwijk, Oud-Charlois) is becoming increasingly important (Gemeente Rotterdam, 2007a; Deelgemeente Feijenoord Rotterdam, 2010a).

6.3 Spatial analysis of social-economic problems and chances

The overall liveability in the neighbourhoods of Rotterdam-Zuid is very low, and could cause a threat to the development of the neighbourhood economy, as well as the development of creative clusters and the attraction of creative and middle class. Safety-perception is low, violence and crime are frequent occurring, nuisance by street kids and drugs form a problem, and the quality of the living environment is low (e.g. public space, green space, street lightning, design, parking) (Deelgemeente Feijenoord Rotterdam, 2010a; 2010b). These problems are difficult to map, and ask for local analysis and on-the-spot interventions, as well as general policies on safety and crime.

However, the presence of street kids can also be seen as a chance. Apparently the street is an important environment for the youth of Rotterdam-Zuid. This is quite logic, as houses are small and families are large resulting in limited space at home to play or hang out with friends. The streets and squares are the second homes of the youth (Deelgemeente Feijenoord Rotterdam, 2010b). Investments in public space and community buildings, where talent can be discovered and developed, are essential, as well as the presence of visible social, cultural and economic activities that show the talent and success of others forming role models.

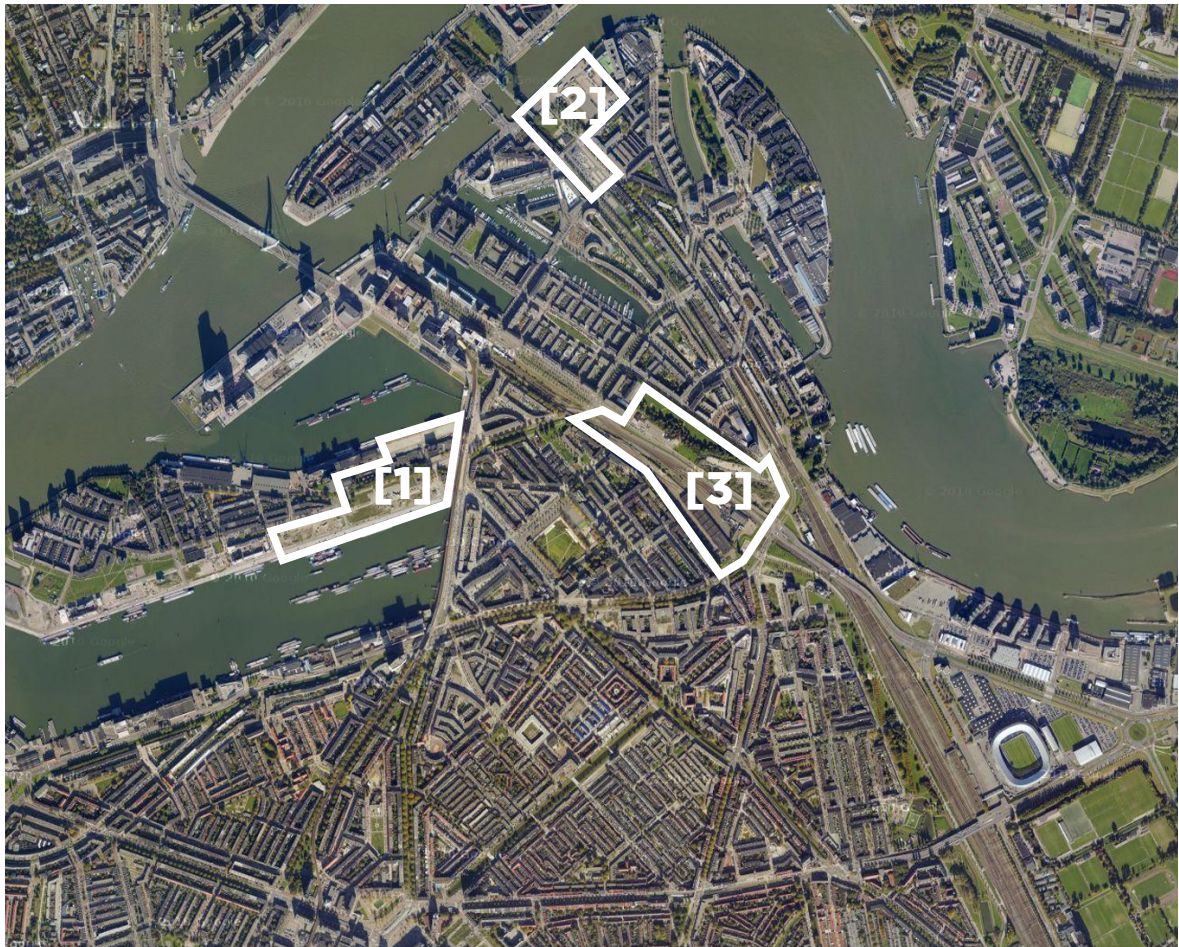
A social-economic problem that does have a clear spatial character is the formed by the demographics and the social-economic status of residents of Rotterdam-Zuid. While Kop van Zuid, parts of Katendrecht, Entrepot, and Stadionpark are relatively affluent and 'white' areas, all other areas house a relatively poor [6.13], low-educated, often unemployed, foreign population [6.12]. This segregation is not only visible on the level of Rotterdam-Zuid, but also on the scale of the city, as the river forms a clear demarcation between the more successful northern part of the city, where also most creatives are located, and the south, of course when ignoring the position of Kop van Zuid. On the other hand, the neighbourhoods of Rotterdam-Zuid are culturally diverse; there are large groups of Surinamese, Turks, Moroccans, Antilleans and Poles.

According to the local urban government, there is a lack of single-family housing, affordable senior housing and of differentiation in living environments and housing types (Deelgemeente Feijenoord Rotterdam, 2010a; 2010b). Both on Katendrecht, in the northern part of Feijenoord,



[6.12] spread of immigrant population (dark is high percentage)
[6.13] spread of wealth (dark is wealthy area)

[6.14] possible location for housing development:
 1. Katendrecht
 2. Feijenoord
 3. Parkstad



and in Parkstad locations are available for the development of new types of housing and diversity in living environments [6.14]. The attraction of middle class and the retention of social climbers in Rotterdam-Zuid are goals set by the municipality. These three locations provide the opportunity to grasp this chance. New groups of people contribute to increased social-cultural diversity, and bring in new types of customers and clients for local entrepreneurs; counteracting social segregation and an increases liveliness and vitality.

There is not only a lack of certain housing typologies and living environments, but also of social, cultural and commercial amenities that appeal to creatives and middle class households, such as attractive shops, restaurants and events, as well as schools and leisure facilities. An important combined effort, attracting both new groups of people and creating new opportunities for local talent development is the establishment of a VWO school, a 'technasium', and a new vocational school for creative, cultural and commercial talent, and the combination of educational facilities with local training facilities, library, and workshops spaces and meeting rooms for local social and cultural activities.

6.4 Spatial analysis of physical problems and chances

An important aspect in attracting new people and improving economic vitality is neighbourhood promotion and the creation of distinctive neighbourhood profiles based on their 'DNA'. Although this concerns an issue that should be placed under the denominator of social-economic characteristics, investments and strategies on identity development lie for a large part in their spatial-physical characteristics. Currently the four neighbourhoods do not have a clear identity, while the possibilities for creating them are out there. Feijenoord has its water and harbours as a major quality, and lies adjacent to Kop van Zuid and could be the location of the third city bridge across the Nieuwe Maas. Afrikaanderwijk has an increased high-urban and diverse environment, and is centrally located within Rotterdam-Zuid and the city as a whole. Afrikaanderplein is an important public space, focal point, meeting place ('Eat & Meet'), market place and podium of social, cultural and economic activity in the area. It is surrounded by landmark developments: Kop van Zuid, Parkstad, Creative Factory and the European China Centre. The Creative Factory at the moment cannot cope with the



[6.15] green structures are interrupted by Parkstad; blue structures (waterfronts) are interrupted as well

demand for business space; Afrikaanderwijk can be the ideal environment for the development of a new creative cluster (Deelgemeente Feijenoord Rotterdam, 2010b).

Bloemhof (yet also the other neighbourhoods) is a melting pot of cultures and it is characterised by a low-rise almost village-like structure and some great monumental buildings, mainly old school buildings. Also other neighbourhoods possess some interesting heritage, offering potential for creative, cultural and social activities. Hillesluis is closely located nearby the sports and leisure cluster Stadionpark, although good connections are currently missing, and the nearby development of an intercity railway station could transform the area into a highly-urban living and working milieu.

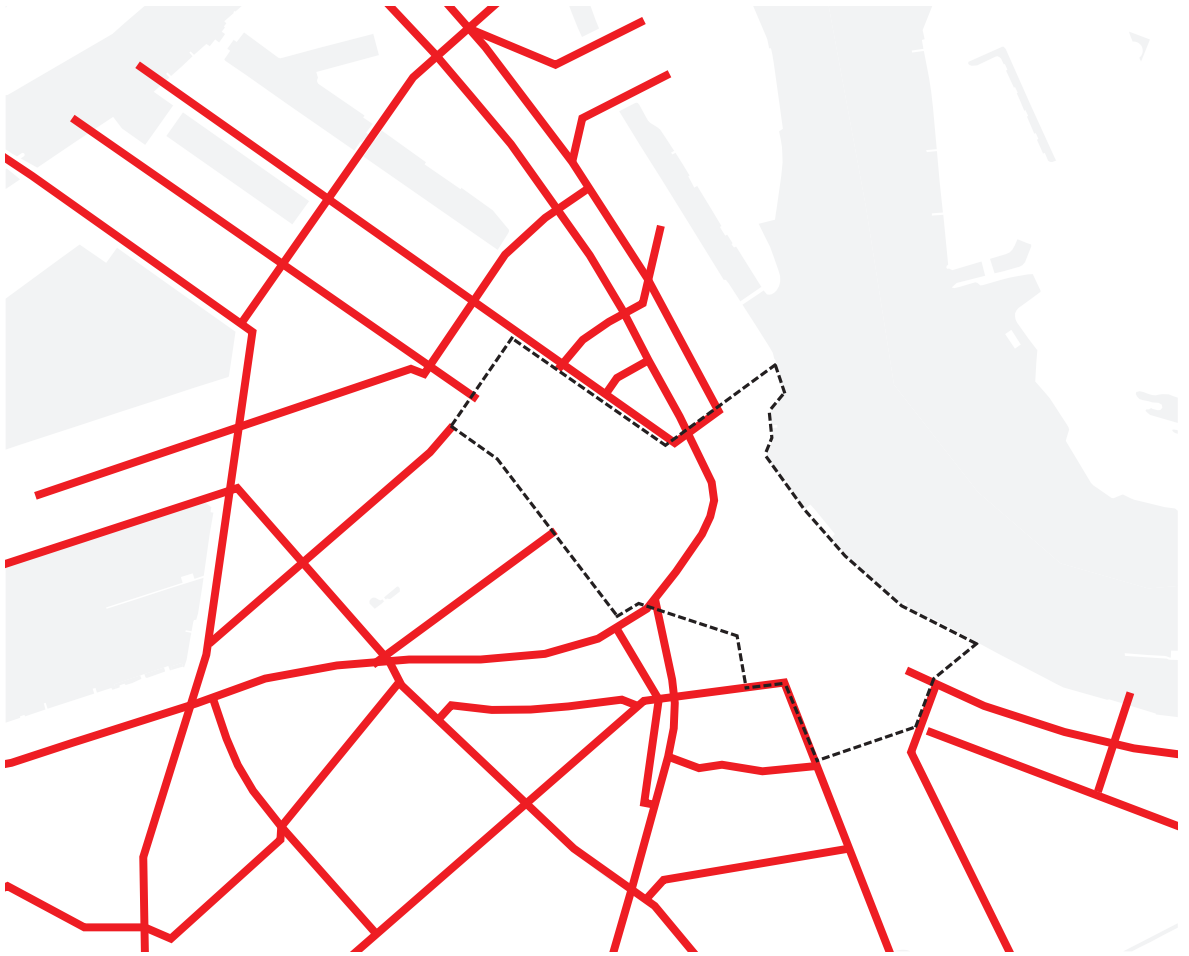
The four neighbourhoods have a high percentage of old buildings; 56% of the housing stock in the borough of Feijenoord is built before 1950, compared to 34% in Rotterdam as a whole (Van Dun en Rode, 2010). In many shopping streets, but also in residential streets, vacant ground floor spaces (plinths) of pre-war housing blocks are available for new businesses. Also former commercial spaces, now occupied for housing purposes but still recognisable as commercial real estate, can be retransformed into (affordable) business spaces. In

addition, historic schools building can be transformed into business incubators, following the idea of Jane Jacobs that new ideas (creative industries) need old buildings, and old ideas (education) need new buildings.

The quality of the living environment of the four neighbourhoods is low, and the morphologic structure is disadvantageous. The physical quality as well as the practical value of parks and other green structures, of water-rich environments, and of other public spaces such as streets and squares is low. High-quality squares (large and small) and shopping streets are a success factor in diversity, liveliness, economic vitality and so in urban regeneration. The improvement of the physical quality and the practical value of these public spaces in Rotterdam-Zuid contribute to more unplanned encounters, face-to-face contact and exchange of ideas, experiences and knowledge between residents, entrepreneurs and one another.

In addition, connections between neighbourhoods, parks and waterfronts along the river and harbours are poor and scarce [6.15]. People attach value to public space that can be used, thus large, high-quality and accessible (Deelgemeente Feijenoord Rotterdam, 2010a). Safe and clear slow traf-

[6.16] continuous routes between neighbourhoods are missing



[6.17] economic zones are isolated from each other



fic routes connecting different neighbourhoods, providing access to diversity in amenities, public spaces, and consequently to social and business networks are lacking in this part of Rotterdam-Zuid [6.16 & 6.17].

The improvement of connections between problem neighbourhoods and more successful and affluent area such as Katendrecht and Kop van Zuid, and area with a higher degree of social, cultural, recreational and economic activity such as Zuidplein, Stadionpark and as well Kop van Zuid, can result in spreading of successful initiatives and increased liveliness and vitality.

Especially the accessibility of Feijenoord needs to be improved; this neighbourhood is surrounded by water on three sides and very isolated. It is cut off from the rest of Rotterdam-Zuid by harbours, the railway tracks the now empty Parkstad area, Laan op Zuid and Kop van Zuid. It is a patch of social-economic problems within an environment of water and other barriers, and relative wealth (Kop van Zuid). Also the accessibility of Afrikaanderwijk and the connections between the neighbourhood, its surroundings and with the city as a whole are to be improved.

Finally, also the spatial embedding of Bloemhof and Hillesluis needs to be improved. Connection between these neighbourhoods and the river, Afrikaanderwijk, the park areas to the south and west, Stadionpark and Hart van Zuid are weak.

Overall, interventions should contain: the creation of new and improved (safe and clear) routes and connections on a local scale; new tram lines; a third city bridge; and a new intercity station.

Space syntax analyses measuring integration and vitality

In order to get a clear picture of the morphology of the area and the degree of accessibility and connectivity, the technique of space syntax analysis is used. A description of this technique and the software that is used to measure the degree of spatial integration of streets in the urban network can be found in the appendix. The maps in this section show two types of analysis: 3-step analysis, measuring the integration of a certain street in the total street pattern; and angular analysis measuring the metric or topological distance and the level integration of the total of streets on different scale levels (i.e. neighbourhood, district, urban).

The 3-step analysis is based on a step depth analysis, which measures the level of integration of one street from that street alone; so how far can travellers (e.g. pedestrians) go without changing directions many times. So, what is the reach of a certain

streets considering its accessibility?

Based on the 3-step analysis, some commercial streets are well-integrated in this part of Rotterdam-Zuid, while others are only well-integrated on the neighbourhood level, or even lower. Well-integrated in Rotterdam-Zuid are Boulevard Zuid (6.18a), Dorchtselaan and Putselaan and in lesser extend Afrikaanderplein (6.18b), Bloemhof-Noord, Hillelaan-Maashaven (6.18c), Polderlaan-Hillevliet and Strevelsweg-Bree. Laan op Zuid (6.18d), Oranjeboomstraat (6.18e), and Vuurplaat are only integrated on the neighbourhood level. The integration of the commercial area around Cor Kieboomplein (De Veranda) (6.18f), Entrepot, Piekstraat, Riederlaan is limited to a couple of streets.

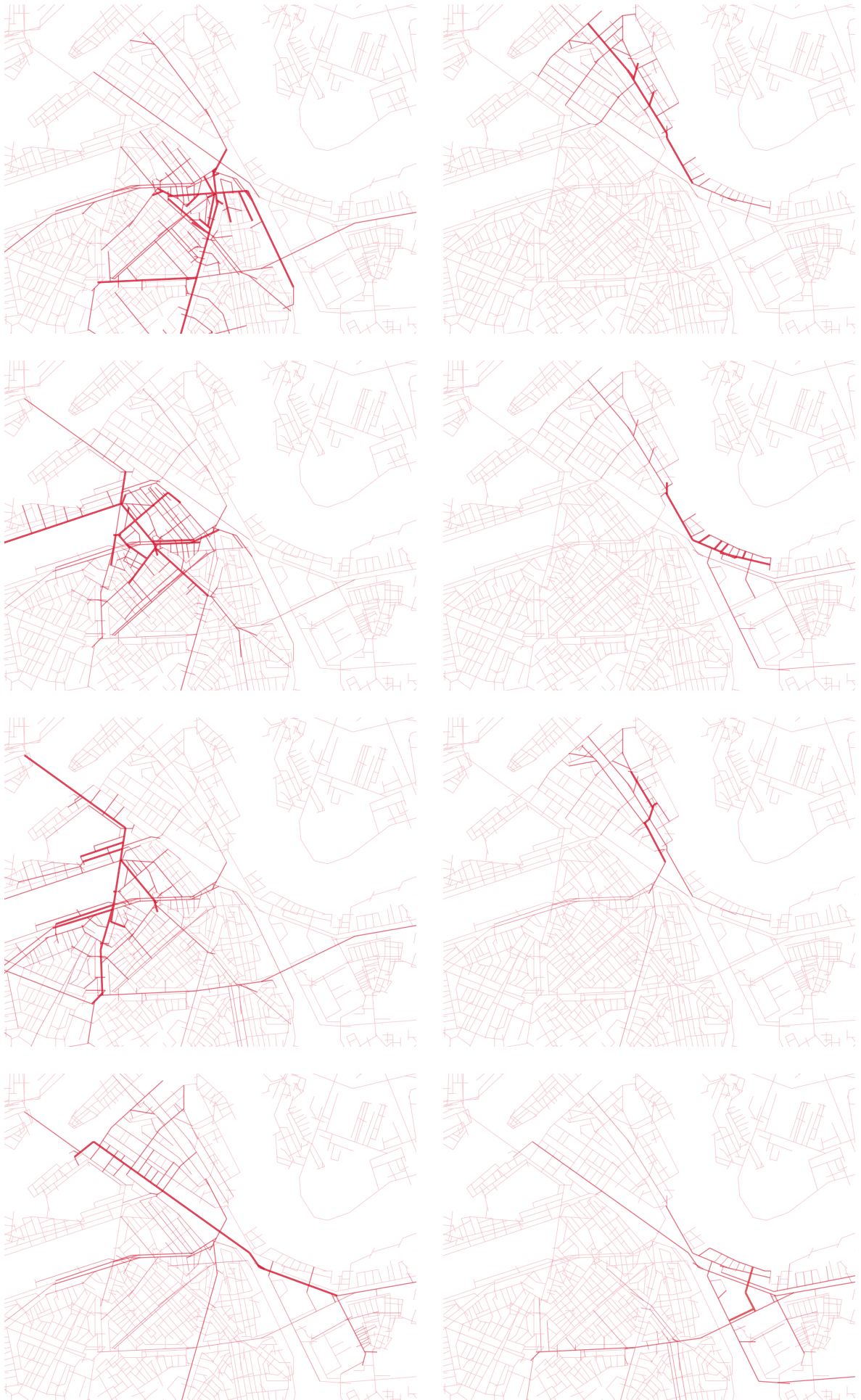
As we can see, especially the commercial clusters located in Kop van Zuid and Feijenoord, as well as the locations along the railway tracks lack connectivity and accessibility. The development of Parkstad, and the removal of the railway tracks as an urban barrier, can increase the integration value and so economic development potential of these areas.

We can also use this tool to measure the level of integration of railway station Rotterdam-Zuid (6.18g) and Stadionpark (6.18h) in the neighbourhood structure. As the results show, also both the railway stations and Stationpark provide few good connections with the four problem neighbourhoods.

Creating new connections between the different neighbourhoods and between their commercial clusters, can improve the vitality of the neighbourhood economy. The relocation of the railway station to a more central and integrated location provides better access for residents to the regional and national network and creates the potential for an upgrade from a local (*stoptrein*) railway station to an intercity station.

Another aspect that can be measured using space syntax analysis is than integration of streets on different scale levels. In this case this is done for three scale levels: neighbourhood, district and city. Two types of angular analysis based on the level of scale are used, measuring metric and topological distance. Measuring the metric distance, which means that the city's street network is seen as a system of shortest paths, is used to measure the vitality of local urban centres. Centres with a high integration have potential for the development of retail and small-scale local commercial services and are well-accessible for pedestrians. The street network of this type of centres has a fine grain that can also be found in medieval historic centres. The

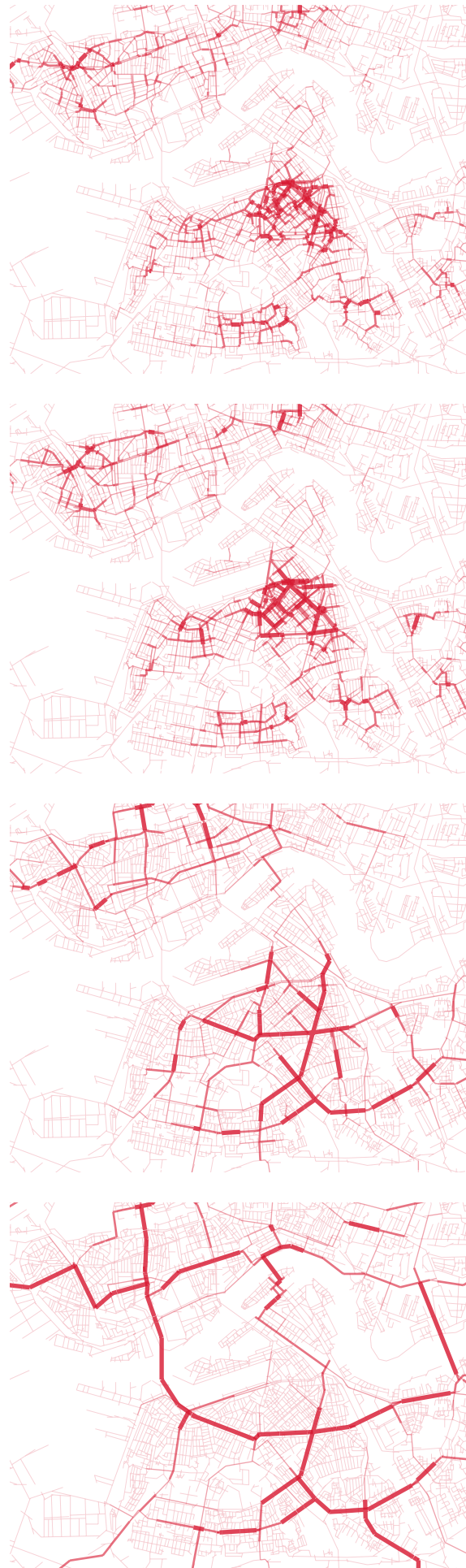
- [6.18a-h] 3-step analyses (top to bottom, left to right):
- a. Boulevard Zuid
 - b. Afrikaanderplein
 - c. Hillelaan-Maashaven
 - d. Laan op Zuid
 - e. Oranjeboomstraat
 - f. Cor Kieboomplein
 - g. Station Rotterdam-Zuid
 - h. Stadionpark



metric distance is measured on a radius of 800 metres (6.19a). Based on this spatial analysis, we can see that Bloemhof and Hillesluis have the potential for being lively neighbourhoods with a vital local economy. Afrikaanderwijk and Feijenoord do not show a high degree of integration on this scale. The high scores of especially Bloemhof and the western parts of Hillesluis are a result of the finely grained street grid. Here urban blocks are relative small, in particular in Bloemhof; while in Afrikaanderwijk and Feijenoord and in the eastern part of Hillesluis, the urban morphology is made up out of larger blocks, especially very long and impermeable blocks. Blocks in Afrikaanderwijk often exceed 100 metres, in Hillesluis and Feijenoord they even exceed 150 metres.

When measuring the topological distance of streets, the integration and vitality of the city's street network is calculated based on fewest turns of paths. Calculation of different scale levels shows streets that are well-integrated on different scale levels. A topological distance analysis with a radius of 800 metres, shows the most vibrant street on the neighbourhood level (6.19b). In the current situation these are Boulevard Zuid, Bree, Hillevliet, Putselaan, Putsebocht and Slaghekstraat. All of these streets are located in Bloemhof and Hillesluis, but only Boulevard Zuid is a lively, diverse and dense shopping street. The fact that this is so lies most probably in the fact that this street is one of the area's main streets and used to be a shopping street providing goods and services for much of the region during much of the 20th century; up till the isles of Zuid-Holland. But also small patches of economic activity, yet not so vital, can be found along Bree, Hillevliet, Putselaan, Putsebocht and Slaghekstraat. The local shopping streets of Afrikaanderwijk and Feijenoord do not appear on this map.

When we increase the scale of the analyses to the district level, streets that are well-integrated in the urban structure of the district (i.e. multiple adjacent neighbourhoods) are shown. This analyses is based on a radius of 3000 metres (6.19c). Streets with a high level of integration have the potential to be lively and vital economic centres on the scale of the neighbourhood and the district. Streets that show high integration values on this level are: Boulevard Zuid, Strevelweg-Bree, Dordtselaan and Hillevliet. The first three streets are not only streets that show a certain level of economic activity, but are also part of the main road network of Rotterdam-Zuid. Striking is that the main shopping streets of Vuurplaat and Afrikaanderwijk do not



[6.19a-d] angular analyses:
a. metric 800m
b. topological 800m
c. topological 3000m
d. topological 9000m

clearly appear on the map, nor do Laan op Zuid, Putselaan and Rosestraat, which are also part of the main road network. This is caused by the fact that they are not-so-well integrated in the district's street network, probably as a result of the large size of the urban blocks along these streets resulting in few side-streets and the lack of fine grain in bordering neighbourhoods.

Measurements with a radius of 9000 metres give an idea of the metropolitan road network. Streets with a high level of integration an ideal location for urban social-cultural functions, commercial services that are oriented on the urban, regional and national market and shopping malls. Here Strevelsweg-Bree is clearly well-integrated on the scale of the city; they are part of a long urban route leading from Rotterdam-West, underneath the river through Maastunnel, across Rotterdam-Zuid towards the highway A16 in the east. Also Boulevard Zuid is well-integrated on this level. Also Laan op Zuid, along which many urban commercial services are located, shows a certain degree of integration. The lower level of integration of Laan op Zuid is probably caused by the T-section near the Nieuwe Maas, on this side the boulevard does not provide a direct continuous route. This is also the reason for the Erasmus Bridge not to appear on this scale.

Other routes that are also part of the urban road network, but do not show up are: Putselaan-Brielselaan, Erasmusbrug-Posthumuslaan-Hillelaan-Maashaven-Dordtselaan, Rosestraat and Stadionweg. The lack of integration is caused by the presence of multiple sharp bends, and limited integration with adjacent streets.

Based on these analyses, we can say that both fine grain as well as the presence of clear routes are in certain extend a measure for liveliness and economic vitality. Another conclusion is that interventions in the morphology (i.e. street grid, urban blocks and routing) of Afrikaanderwijk, Feijenoord and parts of Hillesluis, but also in Kop van Zuid and Parkstad are needed, in order to improve the integration and vitality of streets in these areas on all scale levels.

6.5 Spatial-physical analysis of project area: Parkstad/Maaszicht

The project area is formed by the areas of Parkstad and Maaszicht in Rotterdam-Zuid. Until now the Parkstad area, as already has been described in chapter 4, is undeveloped. Separated from Parkstad by the railway tracks is the Maas-

zicht area [6.20 & 6.21], which is located between these tracks and the river, forming an ideal location for the extension of the developments in Parkstad towards the river, also the neighbourhoods of Afrikaanderwijk and Hillesluis a face to the river. Maaszicht is currently developed as a small-scale business area with shared business buildings for companies specialised in transport, trade and marine activities [6.22]. But currently a relatively large amount of business spaces in vacant.

Parkstad and Maaszicht are crossed only by two main roads: Laan op Zuid leading from Kop van Zuid is the northwest across the railway tracks over Varkenoordeviaduct to Stadionpark in the southeast [6.23 & 6.24]; and Rosestraat and 2e Rosestraat connecting Feijenoord with Putselaan and Boulevard Zuid, giving access to the other three neighbourhoods [6.23]

Laan op Zuid, the dike between Afrikaanderwijk and Parkstad [6.25 & 6.26], and the emptiness of Parkstad currently form a barrier between Afrikaanderwijk, Kop van Zuid and Feijenoord, but can become a connector, not only on the local scale, but also on the scale of the city as it is one of the main urban routes of Rotterdam-Zuid. Especially east-west connections and local slow traffic routes are missing in this area. Also the railway tracks forms a barrier in this area cutting off the city from the river and hampering the development of good physical (and social) connections between the neighbourhood Feijenoord and the rest of Rotterdam-Zuid. The fragmentation of the area does not only have physical and social aspects, but also economic aspects as local economic zones are small and cut-off from others limiting liveliness and the attraction of new customers and clients, and limiting the development of business networks. These issues hamper the vitality and the development and growth of the neighbourhood economy.

Driving or walking through the area we see that the city has yet to be finished here [6.23 & 6.27], and the river seems far away from us [6.21]. Street fronts are not continuous along Laan op Zuid, Rosestraat, Putselaan and Stadionweg, and the edges of the neighbourhoods are not well-defined and undeveloped [6.28]. The waterfront along the Nieuwe Maas river is not continuous but fragmented by business locations and underdeveloped areas [6.15]. Not only built structures, also green structures are not continued through the area. And, as already has been stated earlier, also links are missing concerning the built 'soft ware' in the area, especially pedestrian routes [6.16 & 6.17].

6. Urban analysis: mapping S.W.O.T.



(top to bottom, left to right; all author's own)
 [6.20] railway tracks between Hillesluis (left) and Maaszicht (right)
 [6.21] buildings at Maaszicht block the view on the river
 [6.22] business real estate at Maaszicht
 [6.23] Laan op Zuid and the intersection with Varke-noordseviaduct
 [6.24] Laan op Zuid looking south
 [6.25] Hilledijk surrounding Afrikaanderwijk on the east and north sides
 [6.26] Hilledijk
 [6.27] Parkstad area seen from the south





[6.24]

[6.25]

[6.26]

[6



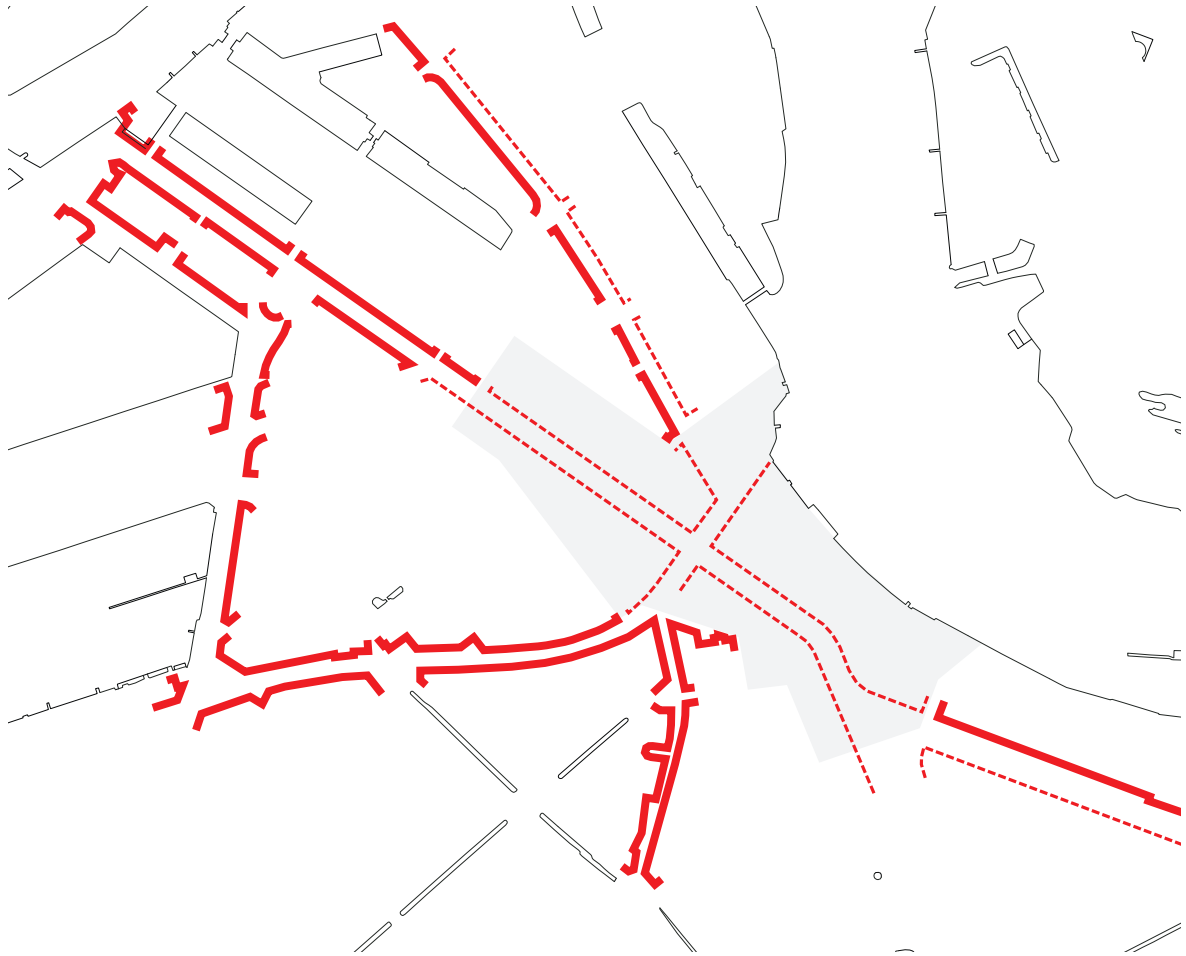
[6.23]
[6.27]

[6.22]

[6.21]

[6.20]

[6.28] uncontinuous street fronts



6.6 Embedding of the project area in Rotterdam-Zuid

In order for the development of Parkstad and Maaszicht to be successful, especially the morphologic structure of the area has to be improved. Currently Parkstad and Maaszicht form barriers between different neighbourhoods, local economic clusters and the river. As a result of this the project area is not well-imbedded in the spatial-physical structure of Rotterdam-Zuid.

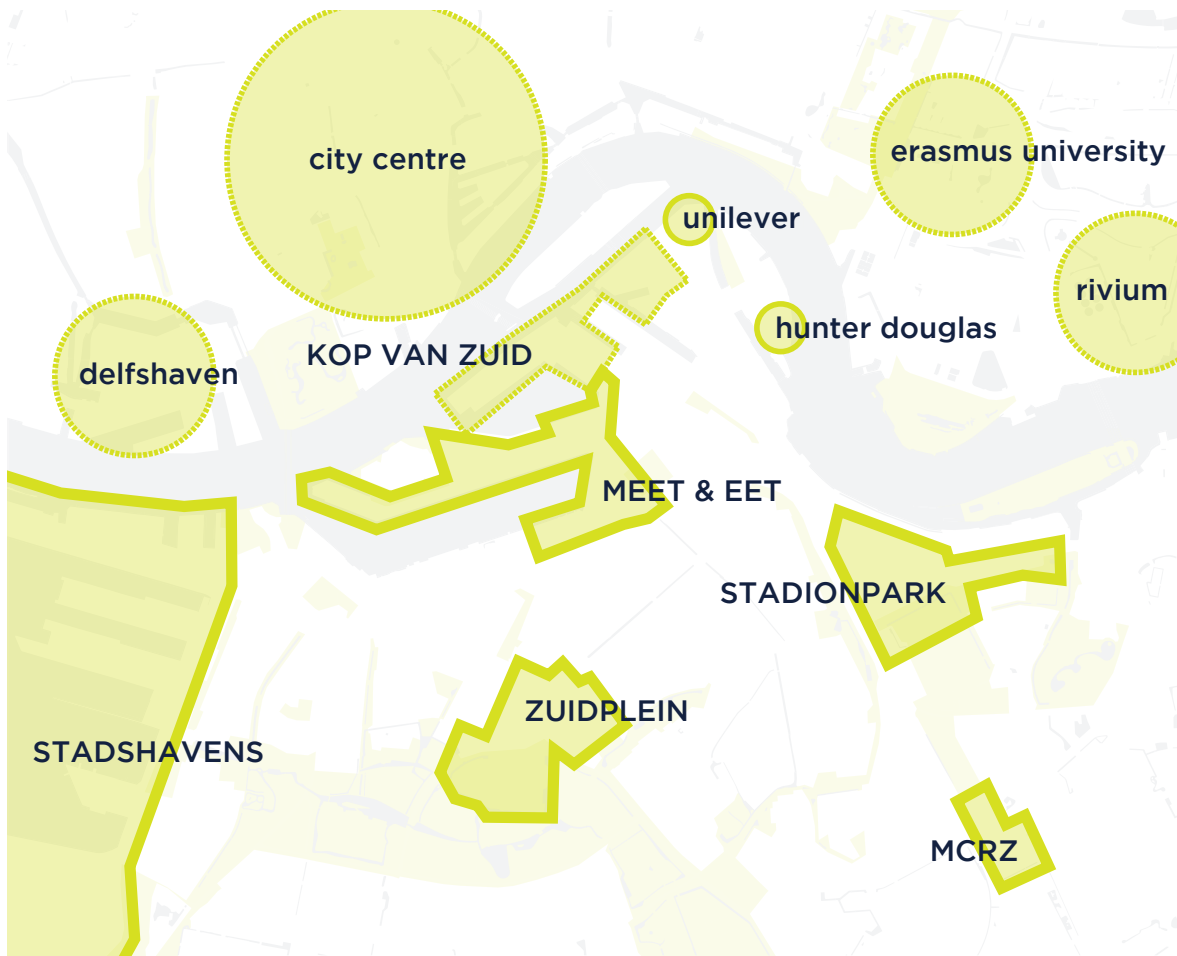
Despite these problems, the area also provides the chance for successful urban development. The geographical location is ideal, located between the city centre, Kop van Zuid, Zuidplein and Stadionpark, offering a wide array of shopping, culture, leisure and recreation amenities.

The city government has appointed six VIP-projects for the development of urban clusters of economic development, commercial and social services, leisure and recreation [6.28]. The improvement of the physical connections with these urban projects, and their social-cultural and economic position in a strategy for Parkstad/Maaszicht are important aspects in the development of the project area, in particular to the ones that are nearby (Kop van Zuid, Eat & Meet, Stadionpark). The six

projects are:

- » Kop van Zuid: commercial and cultural services, large scale office buildings, the Unilever factory and headquarters and the factory of Hunter Douglas;
- » Eat & Meet: 'horeca' and cultural services, SS Rotterdam, European Chinese Centre, Afrikaanderplein and Creative Factory
- » Zuidplein: a large shopping mall of regional importance, commercial services, leisure and culture at the event centre Ahoy, and recreation at Zuiderpark;
- » Stadshavens: harbour-orientated businesses (manufacturing and services such as transport) around Waalhaven and Maashaven;
- » Stadionpark and surroundings: manufacturing, wholesale and services along Stadionweg, and sports and leisure around stadium De Kuip;
- » Zorgboulevard: hospital, medical and healthcare services close to Lombardijen railway station.

The area has potential to become a well-accessible urban environment in the future, when the third city bridge across the Nieuwe Maas, the metro line Zuidtangent, and a new intercity railway station are developed. Also the accessibility by car and by



tram, across Laan op Zuid, is very good.

The diversity in local amenities is relatively high and are provided in Vuurplaat and Wilheminaapier ('modern and urban'), and in Afrikaanderwijk and Boulevard Zuid ('multicultural and market'). The emptiness of the area provides the opportunity for quick, temporary and gradual ('organic') development. Last but not least, the area has the Rotterdam 'DNA', multicultural, diverse and 'edgy', and within the proximity of the harbour and the river.

6.7 Embedding of Rotterdam-Zuid in the city

As already has been said, internal connections within and between neighbourhoods is fairly weak. Better internal connections contribute to liveliness, diversity and economic vitality. But also connections on the urban, regional and national scale play a role in successful economic development and urban regeneration. In the case of Rotterdam-Zuid, many of these connections are missing [6.29]. There is just one tramway connection and one metro line providing access to the city centre, namely across the Erasmus Bridge and underneath the Nieuwe Maas off Kop van Zuid. There are no trams or metro's giving access to the industrial and

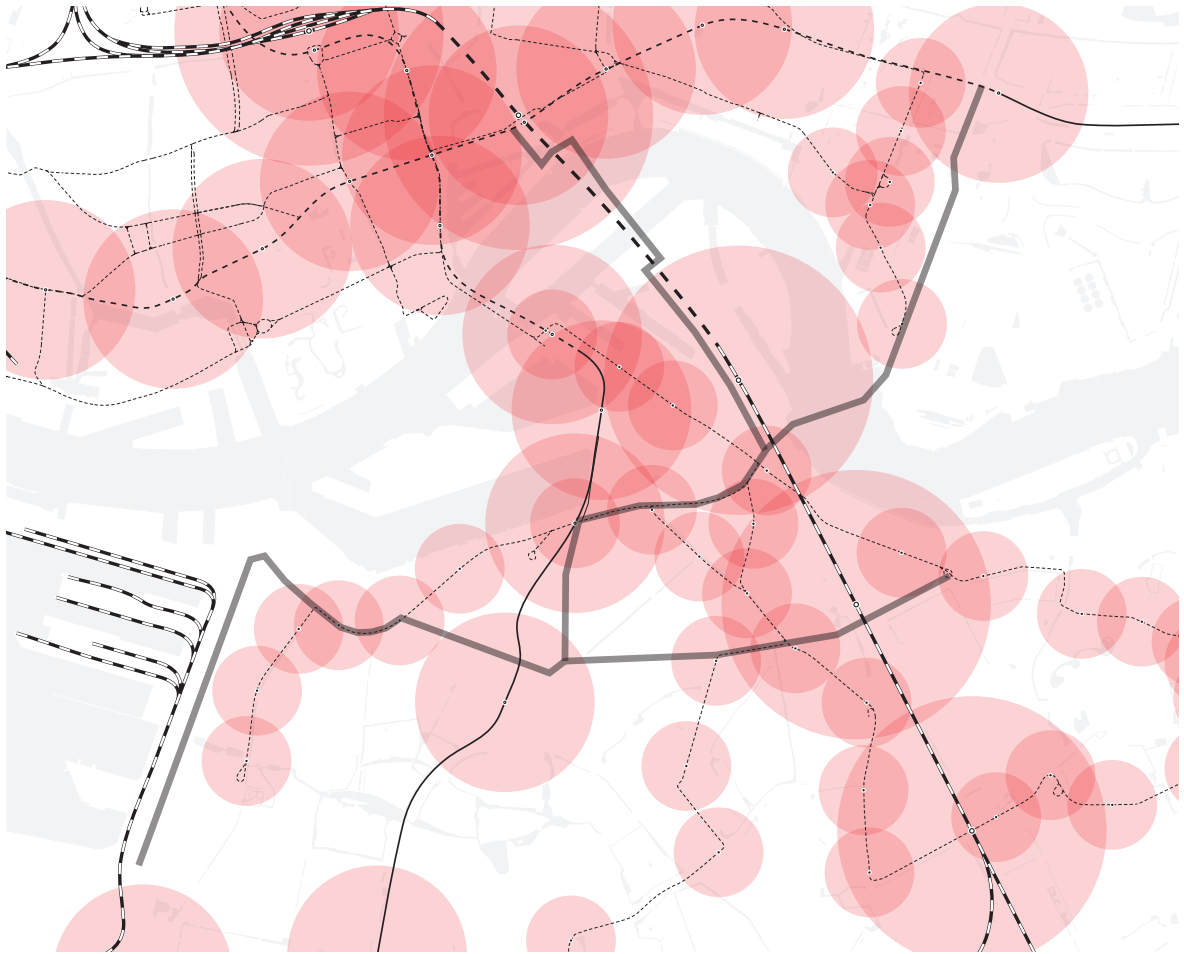
harbour areas in the west, nor to the north-western part, where many of the Stadshavens are located as well as the city of Schiedam, and north-eastern part of the city-region, the latter being the location of Erasmus University and the business parks of Rivium and Prins Alexander. Also an intercity railway station giving direct access to large regional and national networks is missing.

Moreover, also the 'morphological connections' between Rotterdam-Zuid and the city are weak. Based on space syntax analysis, in particular the connection between Rotterdam-Zuid and Kop van Zuid, and the city centre appear to be weak. Other missing links are river crossings. A third city bridge connecting Kralingen and Rotterdam-Zuid as well as more intensive public transport across water (e.g. water bus or ferry) are being studied by the local government.

6.8 Conclusions: meeting the criteria for local creative and economic development

Finally, this analysis is linked to the criteria that are provided in chapter 5. This analysis provides an overview of local and urban leads: what's there and what's not there? Which starting points for de-

[6.29] public transport and missing links



development are present, and which planning criteria are yet to be satisfied? In addition these criteria provide planning and design principles for the development of a plan for the project area: Parkstad/ Maaszicht and environs. The five spatial-physical, three social-cultural and the five economic criteria are listed here; and based on these criteria the area is being assessed [6.30].

Physical-spatial

- » Mixed functions: at least living and working with addition of shopping, leisure, recreation
- » Diversity in real estate: age, maintenance, size, price
- » Infrastructural connections: local routes and nodes, access to the upscale networks
- » Density: concentration of activity; prevent nuisance and overcrowding
- » Public space and ‘third spaces’: visibility, face-to-face contact, exchange

Social-cultural

- » Diversity in cultures, ages, lifestyles and identities increase dynamics and vitality
- » Consumer-oriented development: strategies based on attraction and retention of different groups of people

- » Creativity and economy strengthen each other: encounters, inspiration, exchange, innovation, competition

Economic

- » Business climate: markets, real estate prices
- » Internal and external visibility: network of entrepreneurs, and networks of customers and clients
- » Quality of business real estate, products, services; business training and support
- » Talent, creativity and craftsmanship: talent development and role models
- » Harmonise supply and demand: differentiation, flexibility, branching

Both the project area itself (Parkstad/Maaszicht and environs) and the area to which the project should contribute, formed by the research area (Kop van Zuid, Feijenoord, Afrikaanderwijk, Bloemhof, Hillesluis and Stadionpark) are being assessed.

This assessment based on the criteria can be translated into an analysis of four different categories: strengths, weaknesses, opportunities, and threats (SWOT) [6.31]. Strengths and weaknesses focus on the current situation; ‘what is there?’ They can

	CRITERIA	PRESENCE	QUALITY	REMARKS
SPATIAL PHYSICAL	• mixed functions	yes	++	<ul style="list-style-type: none"> • living, working, shopping • over 50% prewar housing • poor local & urban routing and connections around Parkstad • high density, especially in Kop van Zuid and Afrikaanderwijk • lack of routing; low quality of public space; safety issues and nuisance
	• diversity in real estate	yes	+	
	• infrastructural connections	yes	--	
	• density	yes	+	
	• public space and 'third places'	yes	-	
SOCIAL CULTURAL	• diversity in people	yes	o	<ul style="list-style-type: none"> • multicultural, multinational, young, 'edgy'; no middle and higher class • lack of diversity and poor quality of amenities • creative class is rarely present
	• consumer-oriented development	no	--	
	• creative class	no	-	
ECONOMIC	• business climate and affordable real estate	yes	-	<ul style="list-style-type: none"> • poor business climate; but low real estate prices • creatives and freelancers are not visible • low business quality and lack of business support • lack of human capital; talent is difficult to discover and develop • lack of diversity and branching
	• visibility	yes	o	
	• quality of real estate, products and services	no	--	
	• talent and role models	yes	-	
	• harmony in supply & demand	no	--	

[6.30] assessment of Rotterdam-Zuid based on criteria for a vital neighbourhood economy

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • mixed functions • proximity of city centre, Kop van Zuid and Stadionpark • diversity in real estate; presence of old buildings and need for new buildings (e.g. schools) • historic character of the area • density in buildings and people • drivers of the creative sector (entrepreneurs and schools) 	<ul style="list-style-type: none"> • middle and higher class housing • safe and clear slow traffic routes • large size of urban blocks • connections between neighbourhoods and economic clusters • access of the urban network (main roads, public transport) • access to the city centre • quality of public space • attractive 'third spaces' for creatives • diversity and quality of amenities • business climate • creatives and freelancers are not visible • low business quality (real estate, products, services) • business support • talent is difficult to discover and develop • human capital • economic diversity and branching • tolerance, social coherence and polarisation

[6.31] SWOT-analysis of Rotterdam-Zuid

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • diversity in (visible) real estate • availability of space for urban development • diversity in people • low real estate prices 	<ul style="list-style-type: none"> • segregation and absence of middle and higher class • emigration of social climbers • creative class is rarely present and difficult to attract/retain • growing and developing entrepreneurs leave

[6.32] confrontation matrix of intervention policies for Rotterdam-Zuid

<p>STRENGTHS</p> <ul style="list-style-type: none"> A. mixed functions B. proximity of city centre, Kop van Zuid and Stadionpark C. diversity in real estate; presence of old buildings and need for new buildings (e.g. schools) D. historic character of the area E. density in buildings and people F. drivers of the creative sector (entrepreneurs and schools) 	<p>INVEST</p> <ul style="list-style-type: none"> • invest in mixed highly-urban development (A/B2) • stimulate the development of working spaces for creative industries (C/E/F1) • invest in historic real estate (D1) • attract creatives and that look for affordable working and living opportunities (C3) • invest in talent development (F2) • invest in meeting places (E2) • invest in the development of affordable business space (C4) 	<p>DEFEND</p> <ul style="list-style-type: none"> • accommodate the demand for living space for middle and higher class (A/B4) • accommodate the demand for living space for social climbers (A/B5) • accommodate the demand for living and working space for creatives (A/C/D6) • accommodate the demand for growing and successful businesses (C8) • improve the visibility and contribution of drivers of creativity (F7)
<p>WEAKNESSES</p> <ul style="list-style-type: none"> G. middle and higher class housing H. safe and clear slow traffic routes I. large size of urban blocks J. connections between neighbourhoods and economic clusters K. access of the urban network (main roads, public transport) L. access to the city centre M. quality of public space N. attractive 'third spaces' for creatives O. diversity and quality of amenities P. business climate Q. creatives and freelancers are not visible R. low business quality (real estate, products, services) S. business support T. talent is difficult to discover and develop U. human capital V. economic diversity and branching W. tolerance, social cohesion and polarisation 	<p>DECIDE</p> <ul style="list-style-type: none"> • improve the routing and local accessibility (G/H/I2) • improve public transport (J2) • improve the access to the city centre (K3) • improve the quality public space and stimulate the development of 'third spaces' (L/M2) • stimulate the development of new and high-quality amenities (O2) • stimulate the development of visible start-ups and creative businesses (Q/T1) • create a podium for creative talent (T2) • attract students and creative knowledge workers (T/U2) • improve education and training (T/U2) • improve the position of local retailers and other entrepreneurs (P/R/S/V4) • improve tolerance and social cohesion in public spaces (M/N/W3) 	<p>DAMAGE CONTROL</p> <ul style="list-style-type: none"> • middle and higher class cannot find appropriate housing (G5) • social climbers leave (G/O6) • improve safety (H/M5) • the image of Rotterdam-Zuid is not appropriate to attract and retain middle and higher class (J/L/N/W5) • its image is not appropriate to attract and retain creative class (I/M/N/W5) • its image is not appropriate to attract and retain creative entrepreneurs (I/J/M/O/P7) • there is a lack of high-quality amenities (K/L/O5) • quality of available amenities and 'third spaces' is low (M/N/O7) • growth and development of businesses is hampered (P/R/S/V8) • lack of internship places (T8) • improve educational facilities and programs (O/T5) • improve tolerance (W7) • improve social cohesion (W6) • reduce segregation (W5)
<p>OPPORTUNITIES</p> <ol style="list-style-type: none"> 1. diversity in (visible) real estate 2. availability of space for urban development 3. diversity in people 4. low real estate prices 	<p>THREATS</p> <ol style="list-style-type: none"> 5. segregation and absence of middle and higher class 6. emigration of social climbers 7. creative class is rarely present and difficult to attract/retain 8. growing and developing entrepreneurs leave 	

be considered static characteristics. Opportunities and threats are more dynamic aspects; ‘what is happening?’ According to Trip and Romein they concern processes that “possibly influence the creative production and consumption milieu and the chances of creative industries”. (2010, p.7) Opportunities can be location or city-specific. The assessment of the presence and quality of certain criteria is based upon the analysis of the area.

The inventory that is provided by the SWOT analysis forms the basis for policy interventions. The interventions are assessed based on a confrontation matrix [6.32] of four types of policy: “(1) ‘invest’ in promising strengths to exploit comparative advantages; (2) ‘defend’ threatened strengths by mobilising resources; (3) ‘decide’ about whether to invest to strengthen promising, but weak areas; (4) ‘control damage’ by weak and threatened areas by avoiding them and looking for alternatives.” (Trip and Romein, 2010, p.8)

Based on the results of the assessment and the confrontation matrix, it seems to be a very hard job to attract creatives as well as middle class residents to Rotterdam-Zuid, as well as to retain social climbers. These groups are issued under the nominator of ‘damage control’, meaning that perhaps we should look for alternative solutions for the social-economic regeneration in Rotterdam-Zuid. But nevertheless, many investments and investments that are needed in order to improve the living environment as well as the increase the opportunities of local residents and entrepreneurs, contributes to a better creative milieu as weaknesses are being tackled and are transformed into the strengths of Rotterdam-Zuid. Above all, we can say that interventions in Rotterdam-Zuid are desperately needed, especially concerning talent development, economic strengthening and the improvement of quality of housing and the living environment (Team Deetman/Mans, 2011). The national government has provided the financial conditions for the revitalisation and development of the area with its program *Kwaliteitsprong Zuid*, and the municipal government has provided a certain goal: the development of a creative city (Gemeente Rotterdam, 2007a; 2007b).

The next chapter will start with the identification of promising fields for interventions and urban development policies. They are based on the analysis provided in this chapter, and form the basis for a regeneration strategy based on creative talent development and local economic vitality.



View from Varkenoordseviaduct on Laan op Zuid (Skyscrapercity, 2013)



 De Kuip
Hillesluis
Bloemhof

Noorderell
Wille
Havens
1120-1200

Kruising
Putselaan-
Pretoriaaan
afgesloten



**Strategy: creative talent development
and temporary urbanism**
: STRATEGY AND DESIGN- CHAPTER 7



Open Lab Ebbinge in Groningen (Open Lab Ebbinge, 2013)

Strategy: creative talent development and temporary urbanism

Based on literature, criteria for urban regeneration, local economic development, and the attraction of creatives are provided. The previous chapter has provided an analysis and overview of the local spatial-physical, social-cultural and economic characteristic of Rotterdam-Zuid, of the project location and of the local and urban context. Chapter 6 also gave an idea of the state of Rotterdam as a creative city, concerning its creative milieu and present creative industry. The latter chapter concludes with an assessment of the spatial-physical, social-cultural and economic environment of the project location and its environment, based upon the list of criteria. This assessment resulted in a SWOT analysis, which forms the basis for interventions and policies on urban development.

These interventions and policies are described in this chapter, and form the basis for the urban regeneration strategy for the neighbourhoods Feijenoord, Afrikaanderwijk, Bloemhof and Hillesluis. Parkstad and Maaszicht form the central project location in the strategy, new urban developments in this area should contribute to the regeneration of this part of Rotterdam-Zuid.

7.1 Interventions and policy

The confrontation matrix, that forms the conclusion of the previous chapter, forms the starting point for interventions in the built environment of Parkstad, Maaszicht and its surrounding neighbourhoods, and for policies on urban regeneration and creative city development. In this paragraph four promising fields of intervention and policy are mentioned.

Local talent development

According to Richard Florida (2002), each person is creative, so also the residents of Rotterdam-Zuid. But the local youth, as well as other residents, do not have the possibility to develop their talent. Lack of education and training, internship places, orientation and podiums, development of 'soft skills', social networks, and language proficiency are prime causes for the lack of opportunities among the population. Visible and strong connections and contributions with and by local entrepreneurs, the creative industry, schools and other knowledge institutions, can make up these deficits. Physical interventions are defined as:

- » new schools that aim at specialised talent development (e.g. technasium, HAVO/VWO, vocational schools or *vakscholen*);
- » podiums for talent and high-quality public spaces;
- » multifunctional neighbourhood centres for education and training of adults;
- » attractive and visible business space for entrepreneurs that want to contribute to the local community.

Development of a vital neighbourhood economy

A vital neighbourhood economy contributes to the liveliness and liveability of problem neighbourhoods. But in Rotterdam-Zuid the diversity, quality and vitality of local enterprises (retail, consumer and commercial services) is low, and cultural services (creative industry) are rare. Invest in the development of affordable business space for creative entrepreneurs and starters, and invest in business space for growing successful entrepreneurs, otherwise they will not be attracted or even will leave the neighbourhoods. In addition the position of local entrepreneurs must be improved, business networks need to be supported, and start-ups and small-scale entrepreneurs must be supported (i.e. financial and business support) in order to counteract the low business quality, and lack of certain amenities, diversity and clear branching. Physical interventions are:

- » affordable and attractive business space for start-ups and creative entrepreneurs (e.g. business incubators and in empty plinths)
- » attractive business space for successful and growing entrepreneurs;
- » improvements in the quality of public space of shopping streets and other economic zones;
- » improving the visibility of local entrepreneurs (e.g. by development of plinths and creation of neighbourhood routing).

Interventions in the morphology

A vital neighbourhood economy depends of four spatial-physical success factors: mixed functions, diversity in real estate, infrastructural connections, and concentration. New urban developments in the area, such as Parkstad, must provide a functional mix of living, working, amenities and space of leisure and face-to-face contact. Old buildings (schools, warehouses and empty plinths of pre-war urban blocks) are ideal locations for start-ups, creative entrepreneurs, artists and other creatives.

Invest in these buildings and create affordable and attractive business space. Schools, multifunctional neighbourhood centres and larger businesses can be located in new buildings. Also temporary buildings in attractive and challenging environments can provide space for creative entrepreneurs.

New urban developments should have a finely-grained and open-block morphology and should provide clear routes between neighbourhoods and shopping areas. The accessibility of the urban, regional and (inter)national network (i.e. roads and public transport) should be improved. Finally, economic, but also social and cultural activities and events should be concentrated; on intersections, along important local slow traffic routes, on and around squares and other important public spaces. Physical interventions are:

- » mixed urban development in Parkstad and Maaszicht;
- » development of old buildings for start-ups and creative industry;
- » new school buildings and neighbourhood centres;
- » temporary creative development;
- » improvement of neighbourhood routing in Rotterdam-Zuid;
- » improvement of the connections with urban routes (e.g. Laan op Zuid, Rosestraat, Hillelaan, Derde Stadsbrug);
- » improvement of the public transport network (e.g. new tram lines, water transport, intercity station);
- » develop concentrations of density of people

and activities in existing and new urban environments;

- » increase clustering and branching of economic activity.

Development of a creative milieu

The development of a creative milieu in Rotterdam-Zuid is probably the most difficult intervention. And the attraction of middle and higher, and creative class a goal that is difficult to achieve. A strong creative production and consumption milieu is not present in Rotterdam-Zuid. There are relatively few creative entrepreneurs in the area, most of them located in the Creative Factory and Oud-Charlois. But the presence of invisible creative entrepreneurs should not be underestimated, as there are many start-ups in the neighbourhoods of Rotterdam-Zuid, but when they grow they tend to settle elsewhere, preferably north of the river and in the city centre. Affordable, suitable and attractive living and working spaces for creative entrepreneurs, located in an attractive creative milieu are lacking. The low quality and lack of diversity of amenities, the poor image and lack of authenticity, the lack of (creative) business networks but also of available business space for creatives, 'third spaces' and 'buzz', the poor business climate, the

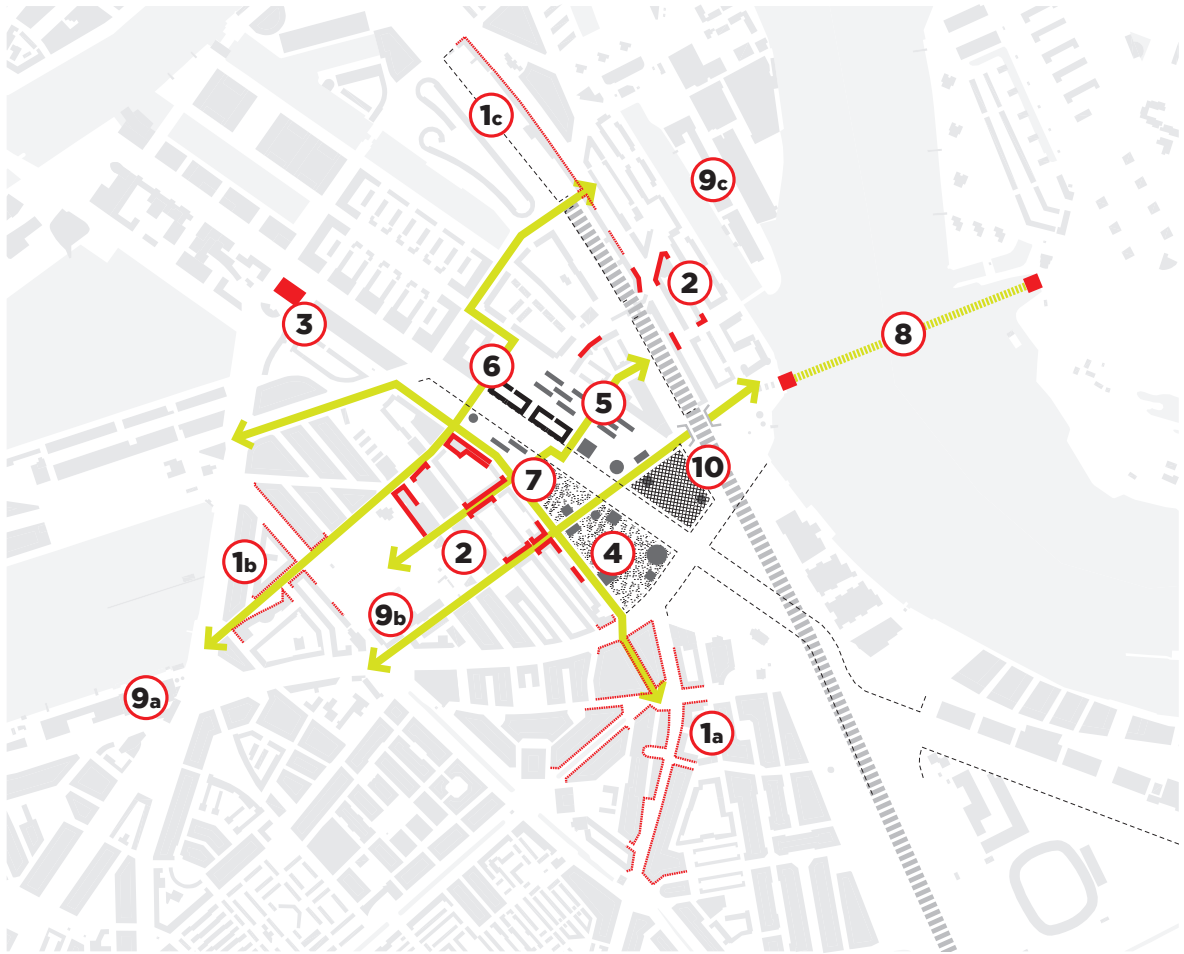
lack of local talent and human capital, and issues concerning crime, violence, nuisance, tolerance and polarisation form additional problems. Many of these issues are difficult to resolve, or can only be resolved by social and economic policies. Useful policy-aimed physical interventions are:

- » development of new dwellings and living environments that appeal to middle and higher class, to creative entrepreneurs and their families;
- » development and upgrading of existing housing stock for new groups (e.g. *klushuizen*);
- » working space for start-ups, creative entrepreneurs, artists and other creatives (see also previous the three fields);
- » aim developments on mixed clustering of creative industries;
- » space for high-quality commercial, social and cultural amenities and events;
- » invest in 'third spaces', and in safe and high-quality public space including green space;
- » invest in the 'DNA' by developing the river front, former harbour areas, monumental buildings and other authentic and distinctive urban structures.



[7.1] temporary development for creatives and students in Open Lab Ebbingingen (Open Lab Ebbingingen, 2013)

[7.2] phase on in the development of Parkstad/Maaszicht: establishing routes and a creative environment



7.2 Temporary and controlled 'organic' development in Parkstad

In this thesis, temporary and 'organic' developments have been mentioned as ways to develop cities and urban environments. Parkstad offers the opportunity for these types of development. At the moment the area is almost empty, offering room for the gradual and flexible development. Against the background of the current economic situation and the poor real estate and housing market conditions, Parkstad and Maaszicht can and will not be developed within a short period of time. But immediate action is needed to tackle the social-economic problems in Rotterdam-Zuid. Direct development and temporary use of space are essential in order to activate the area and to achieve the first results on the short term, and in order to stimulate the development of a creative environment.

During the first phases Parkstad can be a place for creative and innovative experimentation, taking Open Lab Ebbinge in Groningen as an example [7.1]. Examples of temporary developments that can be started are: open air events area; temporary housing for students; temporary working space for creative entrepreneurs and horeca; urban agriculture; exposition space; open air offices for freelanc-

es and creatives ('third spaces'); child day care; and sports fields.

An important aspect of the first phase is to activate the routes between Kop van Zuid, Afrikaanderwijk, Feijenoord, Hillesluis, Bloemhof and Stadionpark. Links that were first missing between these neighbourhoods can be established by developing Parkstad and Maaszicht. Important missing connections are between Kop van Zuid/Feijenoord and Afrikaanderwijk, and between Afrikaanderwijk/Feijenoord and Boulevard Zuid. Also the activation of the edges of the neighbourhoods, which border Parkstad and Maaszicht, is one of the first interventions.

Temporary development and 'organic' urban growth should be essential aspects of the development of the project area. However, in order to develop an area with a vital and lively urban morphology and in order to create connections and slow traffic routes between Parkstad and Maaszicht and their surrounding environment, the development of these locations must be controlled. A framework of routes and connections must be provided, along which temporary and 'organic' developments can occur. Plots for temporary development and for permanent development must



[7.3] reactivation of plinths in side streets in Afrikaanderwijk (author's own)
 [7.4] reactivation of plinths along Hilledijk on the border to Afrikaanderwijk (author's own)

be planned and designed. The plots for permanent development can be built-on gradually. The development of housing can be based on private development by individuals, groups of individuals (i.e. collective development), or by housing corporations. Also the development of commercial real estate can be a collective effort of cooperating entrepreneurs. Parcelling and mixed-zone plans, 'organic' and temporary development contribute to the creation of a diverse and lively urban environment; in terms of function, size, level of privacy or 'collectivism', architectural styles and building ages and so on.

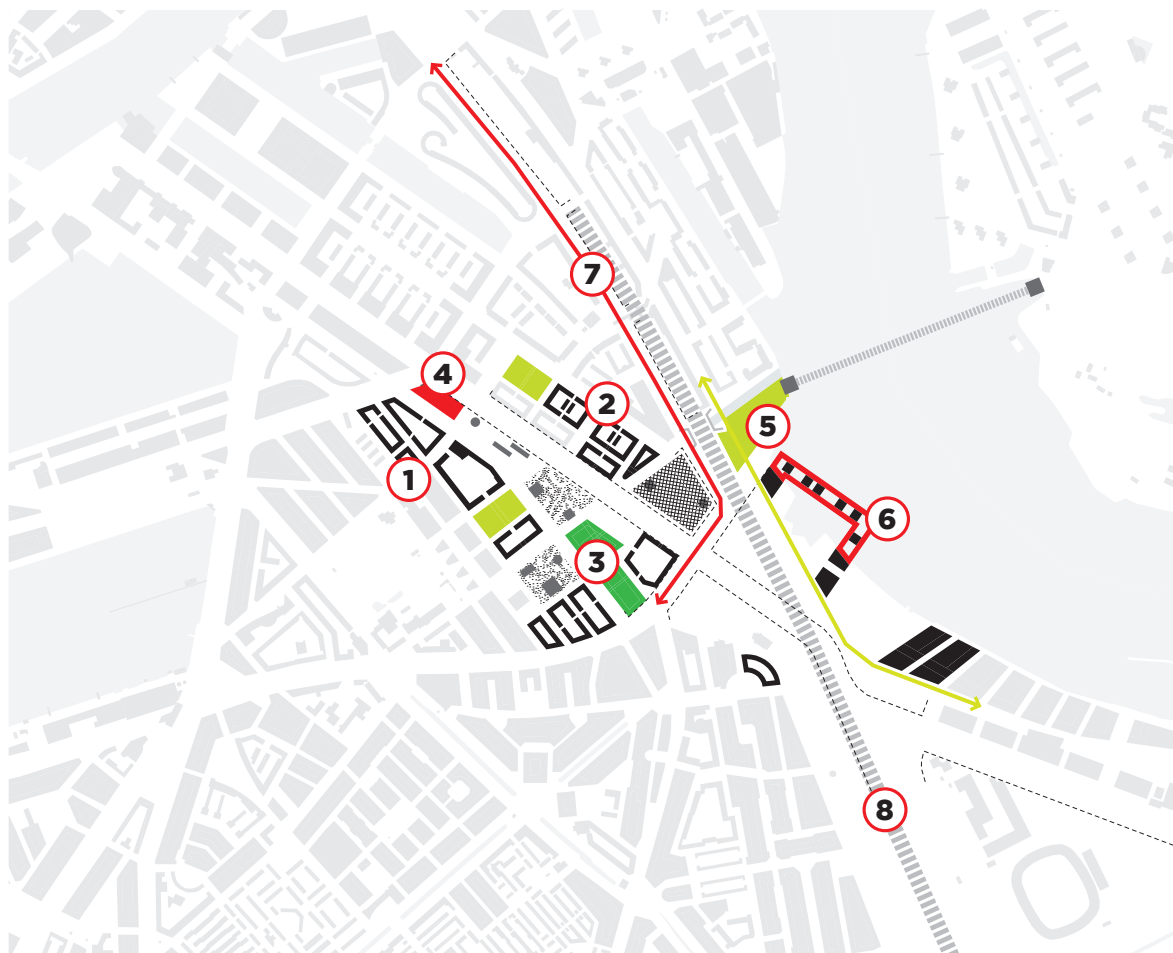
The development of Maaszicht, asks for more radical interventions. The railway tracks forms a barrier between Rotterdam-Zuid on the one side, and the river, Stadionpark and Feijenoord on the other side. Ideally the tracks are placed in a tunnel; extending from the current tunnel entrance near Station Rotterdam-Zuid in the north, and beyond stadium De Kuip and the nearby fly-over in the south. This will be a very costly intervention, but the new important east-west connection can be created, and Rotterdam-Zuid will have its own river front that is a unified part of the city.

Phase one: establishing routes and a creative environment (2013-2015)

The first phase is aimed at the establishment of the important connections between Afrikaanderwijk, Feijenoord, Kop van Zuid, Hillesluis and the river. The now empty Parkstad area is being activated by: developing empty plinths along the edges of [7.3] and side streets [7.4] in Afrikaanderwijk and Feijenoord for creative and other small-scale entrepreneurs; and by the creation of an event area and temporary accommodation for creative entrepreneurs, artists, students, local residents, as well as for urban farming. The fundamental elements and interventions of the first phase are [7.2]:

1. Improving quality of the local economic centres of (a) Boulevard Zuid, (b) Afrikaanderplein, (c) Oranjeboomstraat: quality of public space; real estate; products and services.
2. Activation and reactivation of plinths along side streets and the edges of Parkstad [7.3 & 7.4];
3. HAVO/VWO school;
4. Temporary event area for cultural and social manifestations, and for creative and innovative development;
5. Temporary student housing;
6. Construction of first permanent housing and

[7.5] phase two:
'organic' development and connecting to the city



- | | |
|---|---|
| <ul style="list-style-type: none"> working spaces along Laan op Zuid; 7. Establishment of routes and connections; 8. Creating a connection between Rotterdam-Zuid and Kralingen with a ferry; connecting to Erasmus University; 9. Development of business incubators and learning-working companies in (a) Creative Factory, (b) old school building in Afrikaanderwijk, (c) Piekstraat; 10. Urban farming and knowledge centre for food, health, agriculture and sustainability. | <ul style="list-style-type: none"> working spaces and amenities; 3. Temporary sports park; 4. Indoor sports centre with swimming pool; 5. Waterfront park at the end of one of the routes, near the ferry bridge; 6. Waterfront development; 7. New tram line across Feijenoord; 8. Start with construction of railway tunnel. |
|---|---|

Phase two: 'organic' development and imbedding in the city (2015-2020)

During the second phase Parkstad, and now also Maaszicht and De Veranda, will be development further along the routes established earlier on an based 'organic' development. Also the first contours of an area that is of importance to the city as a whole are become clear. Besides the already existing event area and the ferry, now also a new tram line, a large indoor sport complex with swimming pool, and a new water front are being developed. The major interventions are [7.5]:

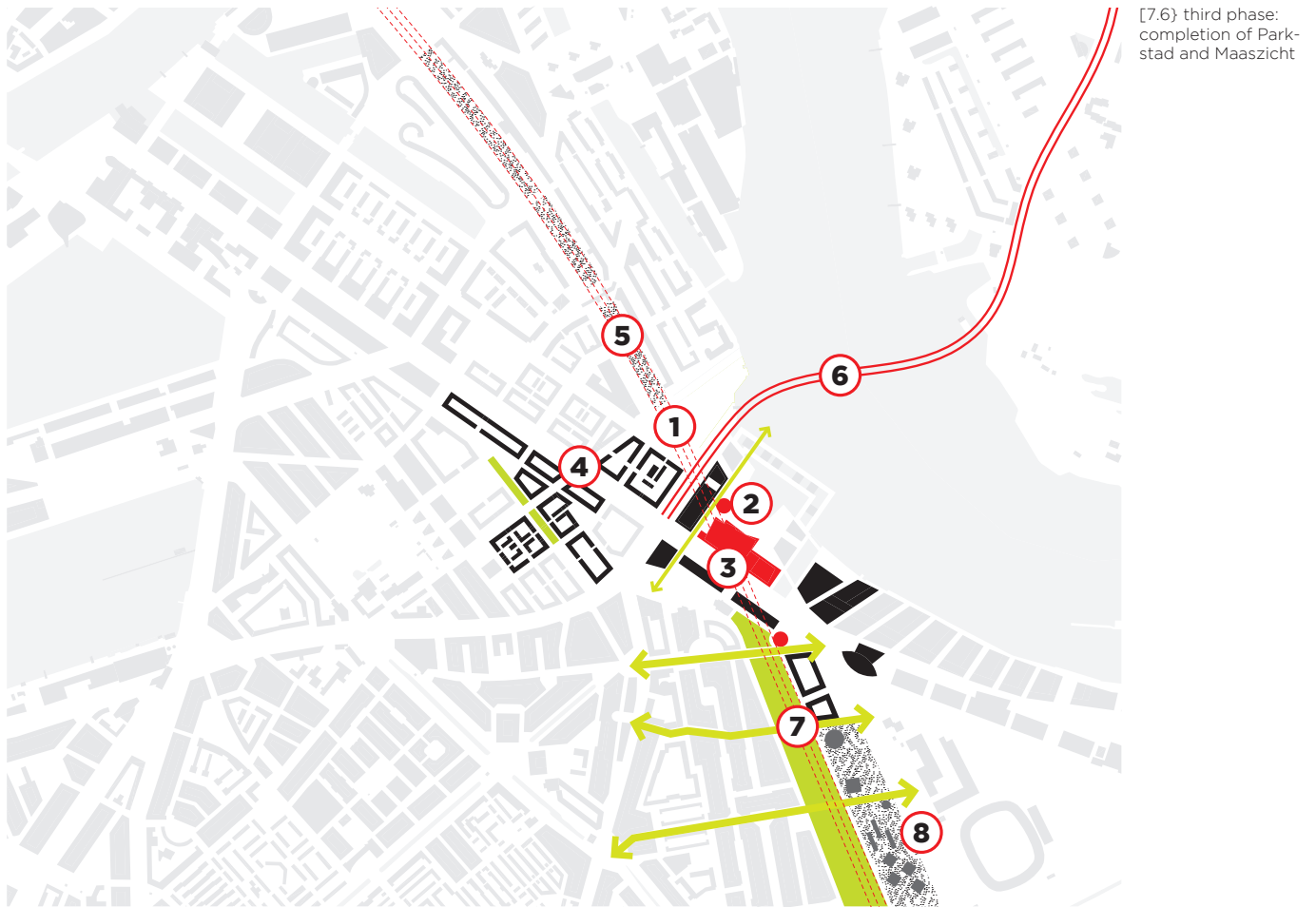
1. Demolition and reconstruction of deprived housing blocks;
2. Further development of permanent housing,

Phase three: completion of Parkstad and Maaszicht (2020-2040)

During the third phase, Parkstad and Maaszicht are completed, as well as the railway tunnel, the new intercity station and the multifunctional learning and development centre along Laan op Zuid. The development of the area continues towards the south and De Kuip, on and aside the roof of the new railway tunnel. Here a new event area can be created aimed at the activation of people in sports and leisure.

The most important projects and interventions of the third phase are [7.6]:

1. Completion of the railway tunnel;
2. And of the intercity railway station with two entrances (Maaszicht and Hillesluis);
3. Multifunctional education and training centre (the architectural design of this graduation



- project), and completion of Maaszicht;
- 4. Completion of Parkstad;
- 5. Urban farming on the railway tunnel roof;
- 6. Derde Stadsbrug connecting to Kralingen and Erasmus University;
- 7. Establishment of routes and connection with De Veranda and De Kuip now the barrier of the railway tracks has been removed;
- 8. Event area in Stadionpark.

in relation to each other and to the city.

7.3 Further strategies and interventions

The development of Parkstad and Maaszicht should not be the only development projects in this part of Rotterdam-Zuid. Although the development of Parkstad and Maaszicht is geared on the revitalisation and regeneration of the entire area, additional interventions are needed. Most important are the redevelopment and revitalisation of the shopping streets based on: branching and clustering; stimulating and improving entrepreneurship through *kansenzones*; improvements in business quality; and improvements in the quality of public space. Additional strategies should aim at improving the overall quality of public space and the improvement of accessibility of the neighbourhoods

The background of the page is a detailed architectural site plan in shades of gray. It depicts a dense urban layout with various building footprints, courtyards, and streets. A prominent feature is a large, curved residential block on the left side, characterized by a grid of small, circular units. The plan also shows other irregular building shapes and open spaces, illustrating the complex urban design of the Parkstad and Maaszicht areas.

Urban design: Parkstad and Maaszicht

: STRATEGY AND DESIGN- CHAPTER 8



Urban design plan for Parkstad and Maaszicht

Urban design: Parkstad and Maaszicht

The result of this research is a combined plan, consisting of strategy for the project area and its surrounding environment and of a proposal for an urban design plan for Parkstad and Maaszicht based on the final shape of the area somewhere around 2040. The strategy has already been described in the previous chapter. This chapter shows some images of the design proposals, in particular for Parkstad and its neighbouring area, which should become the place for start-ups and small-scale (creative) entrepreneurs, as well as for social climbers (either residents or local entrepreneurs) and for newcomers to the area: creatives, students and middle class residents.

This chapter shows a map of the overall design proposal for the area, including a proposal for further developments between Hillesluis and Stadionpark, along the railway tunnel. Furthermore, 3D visualisations of the area provide an idea of the spatial-physical layout of the plan and the environments that is being created with this plan.

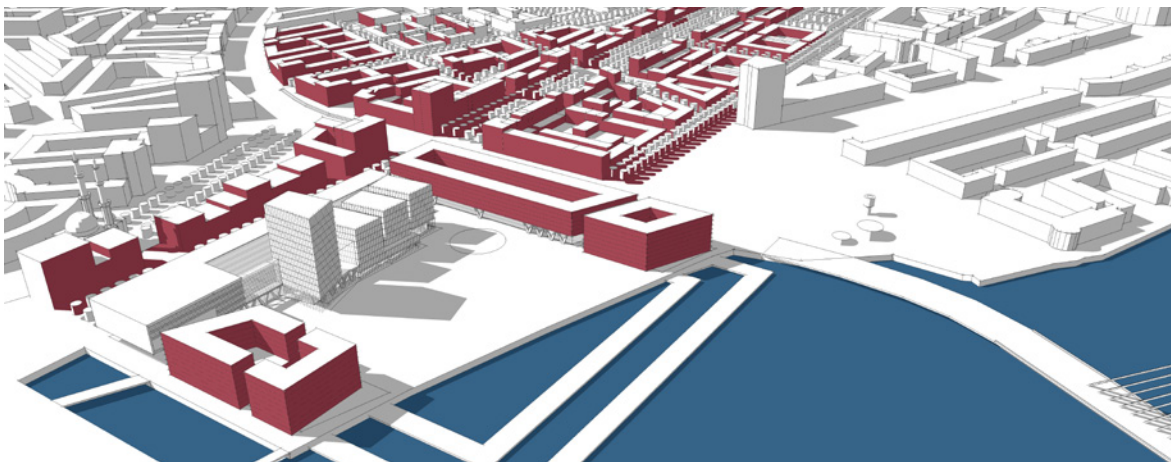
An important aspect of this plan is the creation of connections and routes between the different neighbourhoods and economic zones. The proposed urban design plan will therefore be again assessed using space syntax analysis, in order to see the result of the intervention on the integration, connectivity, accessibility and thus liveliness and vitality of this part of Rotterdam-Zuid.

[8.1] map of the design proposal
[8.2] map showing the main proposal for Parkstad, Maaszicht and Derde Stadsbrug and the additional proposal for Stadionpark





[8.3] satellite view impression of the plans for Parkstad and Maaszicht
 [8.4] birds-eye view impression of Maaszicht with the multifunctional education and training complex, and Parkstad



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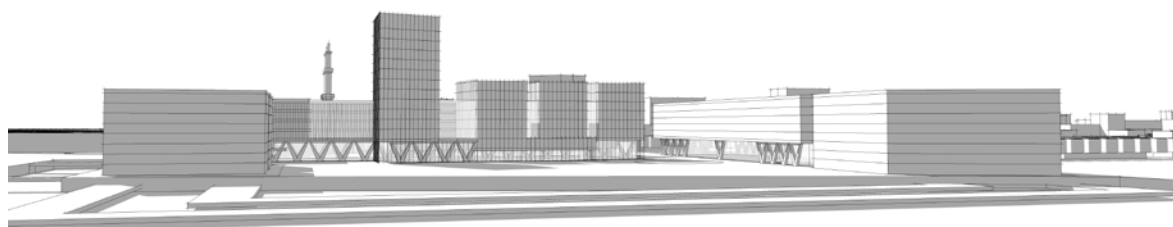
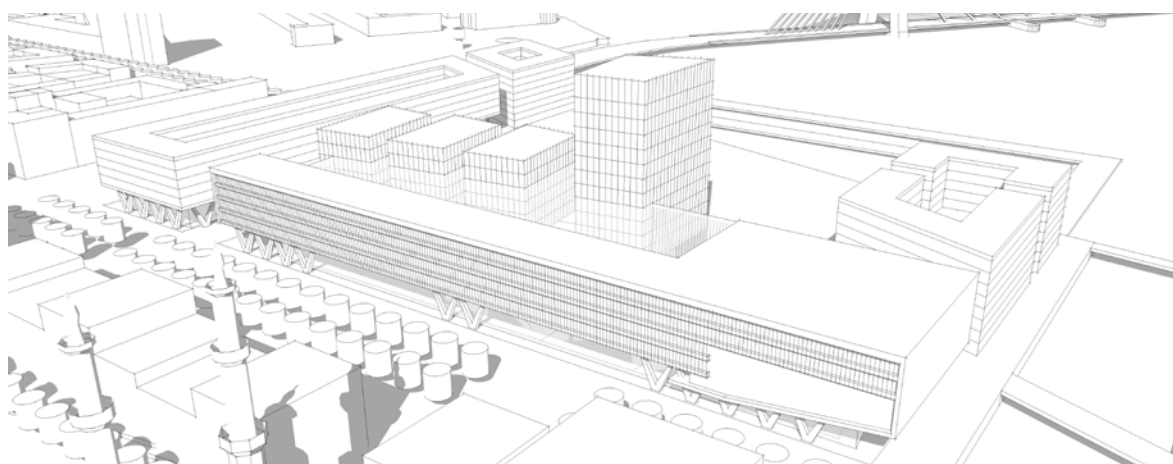
connectivity, accessibility and thus liveliness and vitality of this part of Rotterdam-Zuid.

Maaszicht and the 'hybrid building'

A characteristic and remarkable element of the plan is the design of the area of Maaszicht. This plan was first to be designed during this graduation project, as it was part of the second phase of the graduation project during which an architectural design has been produced for this specific location. The building is designed and constructed over the railway tunnel, which is in terms of construction a big challenge. This 'hybrid' building houses the multifunctional education and training centre that has already been mentioned in paragraph 5.9. Its 'hybridity' and its specific situation on the site is based on multiple aspects, which combined formulate its place and meaning in the community and the city.

In essence it is an urban public building on an urban public location. Drawings of the building can be found in the appendix. The first is based on its program, consisting out of public and less public functions: neighbourhood centre, employment centre, library, shops, restaurant and café, auditorium and 'podium for talent', as well as educational facilities (vocational school) and business

[8.5] the ensemble
and the 'hybrid
building'
[8.6] the ensemble
seen from the river



space for starting and established entrepreneurs. The ground floors are relatively open accommodating the public functions, while the upper floors accommodate the school and business spaces. On the ground floor flexibility is formed by the huge spans between the columns, and because the building is 'raised' about eight metres above the ground. On the upper floors the wide spans between the trusses that carry the building above the railway tracks creates flexibility in use. The central atrium is the visualisation of its public image: a public incubator for creative talent. It creates an open urban podium that can be used in all weather conditions, and it creates visual and physical connections between the different programs in the building.

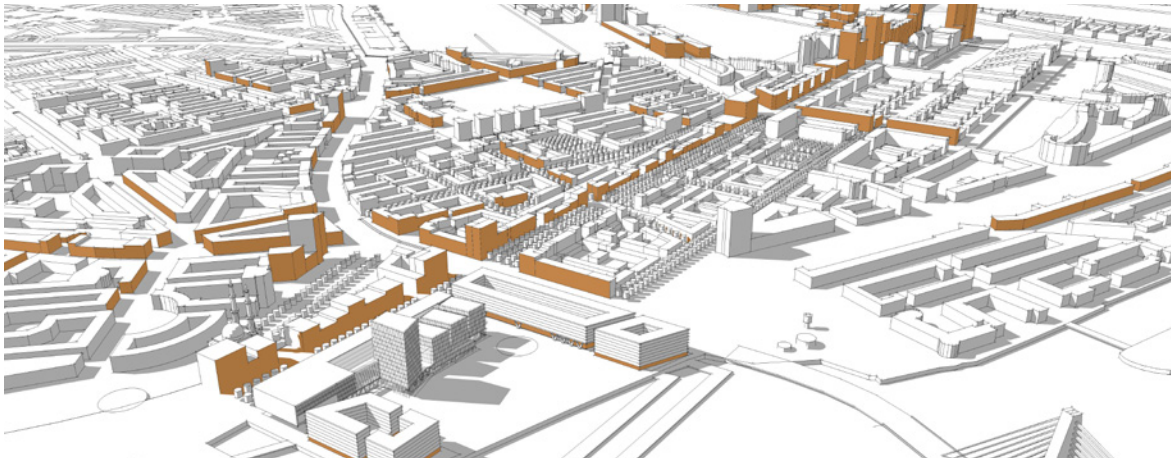
The second, its urban public location, is formed by the site itself. The building is constructed over the railway tracks, which form no longer a barrier in the city separating people and space. It is located at the crossroads of different regional, urban and local routes. The intercity station is located underneath the building; its entrances are on either side of the building and Laan op Zuid. People can change their mode of transport here, and take the tram to Kop van Zuid or Zuidplein, or walk or cycle to De Kuip or Parkstad. Secondly, this spot is

also the landing of the *Derde Stadsbrug* connecting Rotterdam-Zuid with other parts of the city; and following Laan op Zuid one ends up in Kop van Zuid or the city centre, following Putselaan in the middle of Rotterdam-Zuid and further on in the harbours, and following Stadionweg De Kuip and IJsselmonde can be reached. Its location forms also a bridge between Rotterdam-Zuid and the river. The building is part of a larger architectural ensemble surrounding a square located along the Nieuwe Maas.

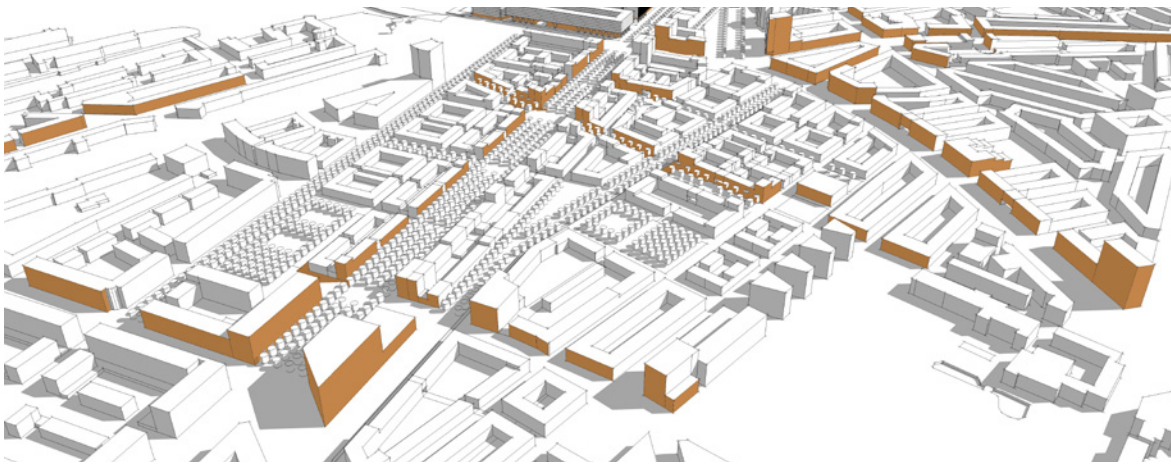
The 'squared' shape of the ensemble strongly marks the location, forming a clear entity on the local scale along Laan op Zuid, as well as on the urban scale situated along the river and clearly visible from the *Derde Stadsbrug*.

Parkstad

The plan for Parkstad is primarily aiming on creating new connections within its surrounding environment and on creating a new type of living environment in Rotterdam-Zuid. The development of routes essential and is the basis for the spatial-physical structure of the plan [8.7 & 8.8]. Additional design interventions that should contribute to liveliness and vitality are: mixed functions, small blocks (the maximum length of the impenetrable,



[8.7 & 8.8] routes and connections in plinths of adjacent buildings blocks



closed urban block is 90 metres), diversity in real estate (age, size, architecture), and concentration (of amenities along the new routes). Moreover, public space and its space qualities are an important aspect of the plan. The main public spaces are formed by Laan op Zuid, its side streets (i.e. the new routes or connections) and the existing shopping streets, and by the sequence of larger and smaller squares, and public buildings (e.g. HAVO/VWO school, indoor sports centre, 'hybrid' public incubator, mosque, creative incubator buildings). The plan is also characterised by the difference in scale between Laan op Zuid and the side and back streets. Laan op Zuid, which has boulevard-like [8.9], dense and highly urban character and accommodates apartments buildings, large town houses, public (social) buildings, and business space for larger companies and shops [8.10]. The residential areas between Laan op Zuid and respectively Afrikaanderwijk and Feijenoord, are less dense and have a more village-like structure of small, mixed and open urban blocks with dwellings, commercial spaces, social amenities and small communal green spaces [8.12]. The dike Hilledijk forms an important aspect in the plan connecting Boulevard Zuid with Afrikaanderwijk and Kop van Zuid, and creating a long green, quiet urban

space in the neighbourhood for short walks, jogging and playing [8.14]. At places where traffic must be able to cross, the dike is gradually sloping [8.13], while at other places it has kept its original strongly sloping character.

An important new neighbourhood route is formed by Martinus Steijnstraat [8.11 & 8.13]. Currently this street withholds any character or meaning, but in this plan its has become one of the most important connectors in the neighbourhood. Already during the first phase of this plan, this route is being developed. The tunnel underneath the railway tracks lies exactly in its path [see image 7.2], and along it schools are already situated (i.e. Albeda College, Da Costaschool). It forms a direct connection between the river and the proposed ferry bridge, Oranjeboomstraat, Laan op Zuid, Hilledijk, Afrikaanderplein, Putselaan and Bloemhof [8.15]. This street did appear clearly on the space syntax maps of the current situation [see image 6.19], but this when computing the design proposal with a space syntax analysis [8.16].

Space syntax analysis

Based on again angular analyses (metric and topologic) and on step-depth analyses, the proposed plan has been analysed and the level of integration,

[8.9] visualisation of one of the building blocks along Laan op Zuid: large apartment blocks with commercial plinths and large town houses along Laan op Zuid; smaller town houses on the backstreet along Hilledijk



[8.10] Laan op Zuid with tram stop and with plinths for commercial and social amenities



[8.11] intersection between Laan op Zuid and Martinus Steijnstraat leading towards the waterfront park along Nieuwe Maas





[8.12] residential 'organically' grown, open and permeable building block with a high diversity in dwellings, small business spaces and social amenities as a school along the side streets of Laan op Zuid

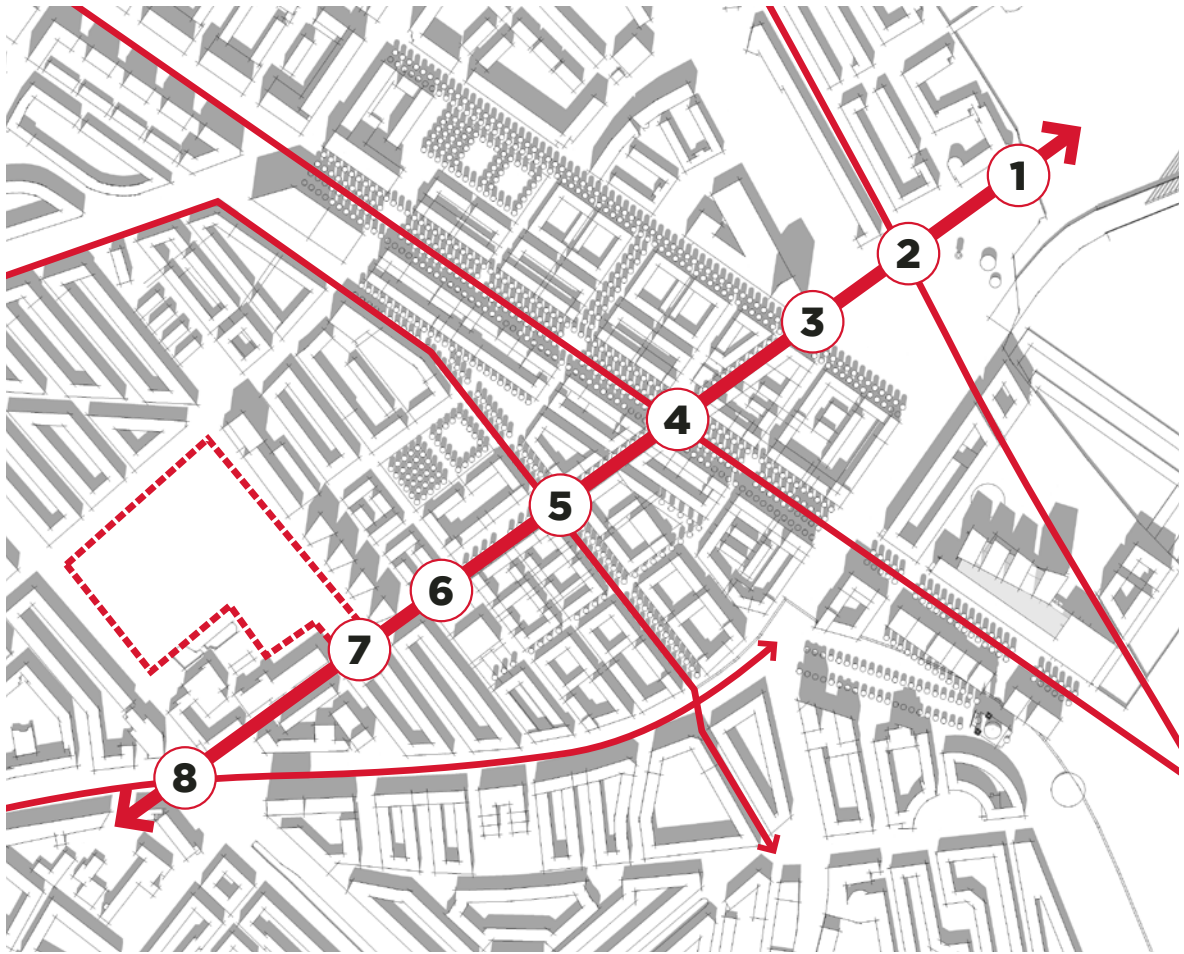


[8.13] the gradually sloping Martinus Steijnstraat before crossing Hilledijk looking towards Laan op Zuid



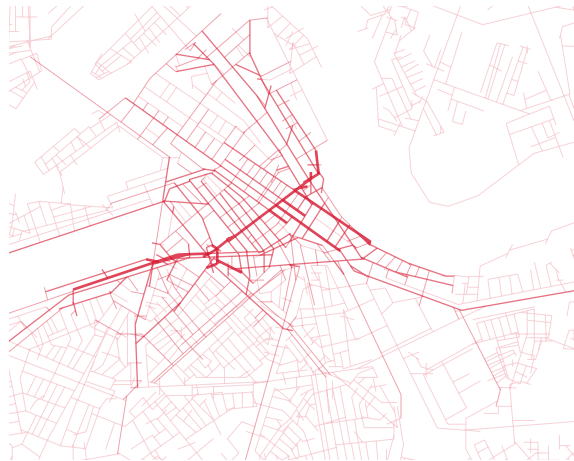
[8.14] Hilledijk and the backside of the building block along Laan op Zuid

- [8.15] Martinus Steijnstraat in the new plan:
1. ferry bridge
 2. Oranjeboomstraat
 3. Albeda College
 4. Laan op Zuid
 5. Hilledijk
 6. Da Costaschool
 7. Afrikaanderplein
 8. Putselaan

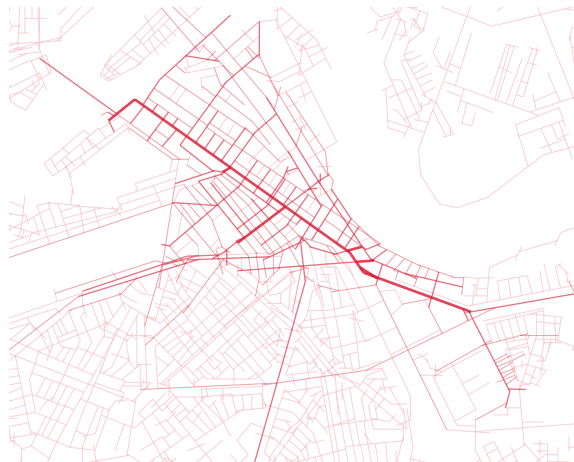


indicating the potential for a lively street scene and vital local economy, has been measured. On both the maps of metrical and topological analyses, Parkstad are well integrated on the local scale (800 metres) [8.16a-b]. The level of integration of the streets of Parkstad is a clear indication that local connections have been improved, and that there is a strong chance for liveliness and vitality, and local economic development. On a larger scale (3000 metres), the integration of Laan op Zuid has slightly improved [8.16c], not as a result of increased connection to the city, but to the neighbourhood. A new line that appears is Slaghekstraat, in this plan connecting Bloemhof, Hillesluis and Stadionpark, but now being a dead-end street. Based on the 3-step analyses, we can say that the local integration of Laan op Zuid [8.17b] and Oranjeboomstraat [8.17d], but also of Afrikaanderplein [8.17c] is improved dramatically. Laan op Zuid and Afrikaanderwijk are now well-connected, especially via Martinus Steijnstraat. The range of the shopping streets around Afrikaanderplein has extended towards Parkstad, and the range of Oranjeboomstraat to Parkstad and Afrikaanderwijk. Yet the level of integration of the northern part of Feijenoord is still low as a result of the enormous length of the urban blocks in this area.

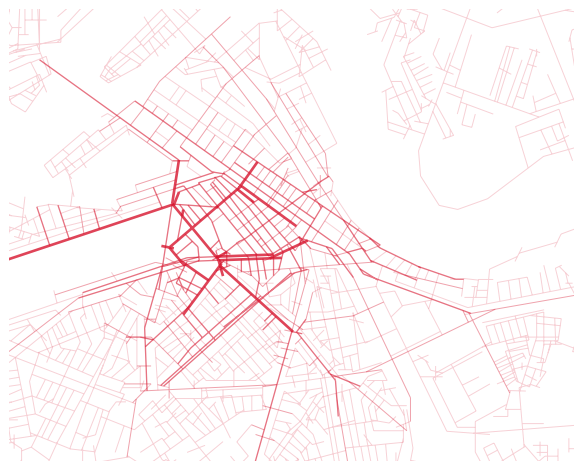
Remarkable is the extend of the range of Martinus Steijnstraat [8.17a]. The relative linearity between Martinus Steijnstraat, Putselaan and Brielselaan create a strong connection between Parkstad and Creative Factory. This street is also well-connected with the Maaszicht area and the river front. The idea that Martinus Steijnstraat would become an important element in the plans for the area arose in a very early stage. And now, the important position this street can hold in this part of Rotterdam has been assessed.



[8.16a-d] angular analyses:
a. metric 800m
b. topological 800m
c. topological 3000m
d. topological 9000m



[8.17] 3-step analysis:
a. Martinus Steijnstraat
b. Laan op Zuid
c. Afrikaanderplein
d. Oranjeboomstraat



Conclusions

This thesis is about the development of a creative city with a vital local economic creating a place for talent development and contributing to social-economic urban regeneration. The case is Rotterdam-Zuid, an area dealing with severe social-economic problems as well as problems of spatial-physical origin. The goal of this project and of the national program *Kwaliteitsprong Zuid*, which creates a basis the proposed strategy on the regeneration of the area, is to solve the social-economic problems in Rotterdam-Zuid based on three pillars or means: (1) talent development and creating improved opportunities for disadvantaged youth and other residents; (2) a vital neighbourhood economy creating opportunities for new and established entrepreneurs and improving the liveliness, liveability and vitality of the neighbourhood; and (3) living quality and improving housing conditions and the living environment.

Two of these pillars, the ones which are the least 'spatial' are the basis for this research and project. The general question of this thesis is: 'can creative industries or local entrepreneurs in general, contribute to social-economic regeneration?'. This question is placed in a certain context, Rotterdam-Zuid, resulting in the following question: 'how can local creative entrepreneurs contribute to the social-economic regeneration of Rotterdam-Zuid?' This answer to this question can be divided into two parts: their active contribution and the passive contribution. The answer to the general question is yes, the answer to the second question is as follows, and explains the contribution of creative as well as other entrepreneurs in social-economic regeneration.

The active contribution of creative (and other) entrepreneurs is based on their involvement of the development of local residents and the community. Creative entrepreneurs can assist in the development of local talent, by given youth and other residents a podium to express their talent, whatever that may be. They can also be involved in education, training and skill-development, as well as in orientation of schooling of work. Local entrepreneurs can provide courses and workshops, and can be involved in the organisation of local events supporting and activating the local community, increasing participation, bonding, talent development and network-building. The presence of a cluster of creative entrepreneurs can even increase the number of jobs in a city, not necessarily on a local scale, but their contribution to employment growth has been proven. Also other local entrepreneurs, such as retailers of restaurateurs can have similar contributions; their involvement can even be stronger as they are already part of the local community. However, they do not provide the stepping stone towards the wider urban labour market, as their business activities and the business networks are rather limited and on-sided.

A strong example of the contribution of creative entrepreneurs in urban regeneration is creative businesses incubators. The combined effort of the businesses in such as incubator can result in stronger and more significant initiatives; they are also an ideal environment for the development of social and business networks, which are important in the creation of new job and business opportunities.

Creative entrepreneurs, also have a passive contribution to social-economic regeneration. The attraction and creative entrepreneurs to the neighbourhood, diversifies the neighbourhood economy creating a wider and stronger basis for the further development of the local economy. New types of entrepreneurs bring new amenities. They also ask for certain new amenities and so create a market for even more and diverse amenities. The improvement of space qualities, such as high-quality amenities, attracts more new citizens, such as middle class residents, and makes sure that social climbers are retained. Multidimensional social and business networks appear, contributing to the success to residents and local entrepreneurs.

Overall increased diversity, results in increased liveliness and economic vitality.

However, the attraction of creative entrepreneurs and other creatives on happens on certain conditions. The creative class, demands a certain level of place qualities; most important: a tolerant and

open society (Florida, 2002); a creative production and consumption milieu and high-quality amenities supporting creatives and their families (Romein and Trip, 2010); and a lively and vital neighbourhood structure (Jacobs, 1961). Not all of these place qualities are present in Rotterdam-Zuid, hampering the possible development of a creative environment. The lack of tolerance and openness of the community in Rotterdam-Zuid, the lack of a strong local creative production and consumption milieu, and the spatial-physical problems of the urban structure; they all limited the development of a strong neighbourhood economy, let alone a creative economy.

Yet, some of the preconditions are there. Rotterdam-Zuid is in a slow process of transformation and regeneration; especially Katendrecht, Pendrecht and Charlois show some strong examples of social-economic regeneration, and sometimes even gentrification. The creative entrepreneurs is slowly finding his way to Rotterdam-Zuid, settling in the Creative Factory, Afrikaanderwijk, Oud-Charlois of in one of the Stadshavens of Rotterdam-Zuid. Not all creative entrepreneurs ask for close proximity of high-level amenities; Kop van Zuid and especially the city centre are close by and offer a wide variety of amenities to which the creative class feels attracted. The old neighbourhoods of Rotterdam-Zuid provide an affordable, diverse, authentic and dense environment for start-ups and other small companies, also on the creative industry. Important qualities are formed by the diversity in cultures and nationalities, the streets culture and roughness, and the 'port and river character'. These are all examples of social-cultural and symbolic place qualities that are present and very relevant as well.

Many of the conditions, on which a creative milieu and the development of a vital neighbourhood economy are based, are created by policy interventions. But policy is not the field of work of urban planners and designers. For us it is about spatial-physical interventions. Here lies our assignment, our challenge.

Based on the literature research and the urban analysis, a strategy and urban plan have been based, which answers the third and final main question: 'where in Rotterdam-Zuid can we give physical shape to this contribution, in form of spatial planning and design?' The location for the intervention is Parkstad. This area is currently undeveloped, offering an ideal location for experimentation as well as structural urban development. The devel-

opment of Parkstad and its surroundings tackles a number of problems or weaknesses, and the area has the potential to become a creative milieu and can play an important role in the development of a strong local economy.

The strategy and urban design plan for Parkstad and environs are a result of the evaluation of the area and local context based on criteria derived from literature about the development of creative clusters, creative milieus, vital neighbourhood economies and urban regeneration. The weaknesses and opportunities, of which some are mentioned here, are derived from a SWOT-analysis. Combining the strengths, weaknesses, opportunities and threats in confrontation matrix, leads to an overview of possible policy interventions, both physical and non-physical.

The emptiness of Parkstad is a hole in the spatial-physical structure, as connections and routes between neighbourhoods and economic zones (e.g. shopping streets, creative clusters such as the Creative Factory and other commercial centres) are missing. Consequently also the social and economic structure is fragmented, limiting opportunities of residents and entrepreneurs and limited social and economic development and urban regeneration processes. Also links urban and regional networks are missing.

However, the area has also great potential. It is located nearby the city centre and important VIP-projects such as Kop van Zuid, Eet & Meet, Stadionpark and Zuidplein. Urban infrastructures are available but the accessibility is limited. In addition the area is an ideal location for the development of upmarket housing for social climbers, middle and higher class residents. Attracting them brings in new groups and people and new markets to Rotterdam-Zuid.

Deal with these problems, and seize the opportunities. But, how can this be done? The current economic situation asks for long-term development as the real estate market has collapsed. On the other hand, local interventions are badly needed in order to improve the social-economic situation in Rotterdam-Zuid. Quick wins are not a solution, the problems in Rotterdam-Zuid ask for a sustainable and fitting solution to the social-economic and physical problems the district and its neighbourhoods are dealing with.

The temporary and 'organic' development plan for the area can contribute to the creation of an environment that fits the location in terms of its physical, social and economic situation and character. This type of development creates the opportunity

for experimentation and creativity, but also creates a scheme for future, permanent development along important lines, such as routes connection isolated areas. Within this framework there is also room for a supportive program of schools, neighbourhood centres and public spaces, offering 'third spaces' for creative entrepreneurs and a podium for talent development.

Can creative industries or local entrepreneurs in general, contribute to social-economic regeneration? Yes, but it demands the combined effort of local entrepreneurs, residents, project developers, schools, policy makers as well as professionals such as urban planners and designers to come to the right policies and interventions. In the case of Rotterdam-Zuid, it will probably had difficult task, but the area does have potential and Parkstad offers the opportunity to both tackle major spatial-physical problems and to seize the huge potential. In Parkstad a lively creative environment can be created with a vital economy, which is well-integrated in the local and urban network, providing new opportunities for local talent and for new entrepreneurs.

Both talent development and the strong neighbourhood economy will eventually contribute to social-economic regeneration in Rotterdam-Zuid.

Reflection

In this last chapter I will briefly review the results of this thesis. Two issues are worth reflecting here. The first is the feasibility of the strategy and design plan I propose for Rotterdam-Zuid. Yes, talent development, a strong neighbourhood economy, improved housing and living conditions and the attraction of new groups of people to Rotterdam-Zuid are essential aspects in the regeneration of the area. But whether the creative industry and the creative class can be attracted to Rotterdam-Zuid and contribute to social-economic regeneration is questioned. The possibility of the development of a local creative production and consumption milieu needs further research. A relevant question in this respect is: 'do Rotterdam's creative entrepreneurs see the possibility to settle in Rotterdam-Zuid, what attracts them or what stops them in moving to the area, and what role do they ascribe themselves in urban regeneration?' The opportunities and possibilities that lie in the development of Parkstad are clear, but that its development has to be geared on creativity is still a question.

The second aspect I would like to reflect in is the field of work of urban designers and planners. Large sections of this thesis are about policies, and social, cultural and economic processes, and other things that are difficult to translate in to physical space. Physical space is the key-aspects of our research and our profession. Many actors are involved in urban developments such as the regeneration of Rotterdam-Zuid, but the contribution of urban planners and designers is based on the planning and design of physical space. We can design spaces, their physical interrelationships (connections) and their shape (architecture). We can design them in a certain way so that they can

accommodate programs; that they will be used and function properly; provide relationships between people creating networks; a so that they provide character and image to a place. This is what we can do, but we can steer individuals, but society and social and economic processes are difficult to steer into a certain direction. We create the right spatial-physical conditions, but the combined efforts of all actors involved are key to the success of the proposal made by planners and designers.

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Appendix 1: space syntax analysis

Space syntax is a set of techniques that is used to analyse a city as a network of spaces and to observe how these networks relate to functional patterns such as movement and land use (Van Nes, 2008). Space syntax analysis has been practiced for two decades and has been developed into a useful and precise tool for spatial urban analysis. Based on empirical research (based on the two previously mentioned aspects), space syntax has made it possible to make a set of theories on how urban space networks are related to social, economic and cognitive factors which shape these networks and are affected by these networks.

Space syntax contributes to the understanding of “how cities are built up socially as an effect of societal activities and how urban space functions as a generative power for social activities” (Van Nes, 2008, p.2). It has proven to be a useful tool to compare before and after situations of structural urban changes in an area. So the effect of a certain intervention or urban design proposal in the urban structure can be tested using this technique.

Human activities in urban space are influenced by accessibilities, visibilities, adjacencies, openness and enclosures in built environment. The first three criteria are the most relevant in case of the spatial urban analysis performed in this thesis. They play a major role on the scale of the urban fabric as a network of spaces; while openness and enclosures are limited to the scale of the building block.

Depthmap software

In order to execute space syntax analysis calculations the program ‘Depthmap’ is used, which is developed at the University College London. Using AutoCAD or Adobe Illustrator maps of all streets (cars and/or pedestrians) are drawn and imported in the Depthmap software. By measuring the connectivity of streets in relation to all other streets in the network the level of integration can be measured. Different measurements can be done. The global integration shows the most integrated streets in relation to the entire network. These are freeways, highways and other major urban routes. Also the areas that are well-connected

to these routes are often strongly globally integrated (image 1a). Local integration shows all locally well-integrated areas. These areas are vital and often pedestrian-friendly local shopping areas (image 1b). According to previous research the flow rates of pedestrians through cities correlates with local integration values while vehicle flow rates correlate with global integration ones (Van Nes, 2008).

In case of Dutch cities the use of the normal global and local integration tends to show weak results. This is caused by the fact that space syntax analysis maps are made out of separate lines that indicate a certain line of sight. Curved streets, which are common in the Netherlands, are made up out of multiple straight lines. Depthmap sees these lines as separate streets with junctions in between, while they are actually continuous lines or streets, which are a curved but unified spatial element. As Depthmap is using a step-analysis each separate line counts as one street which has a negative effect on the integration value. In order to reduce this effect, angular analyses are made instead of the general axial analysis (image 2). This way angles are taken into account and curved streets are seen as one continuous street (image 1c). When the angle between different street elements is close to 180 degree people tend to see the route as one continuous line (Van Nes, 2008).

Conclusions

Some streets end up being spatially integrated, while others are spatially segregated. Based on previous research it turns out that spatially integrated streets are the most lively and economic vital streets; shops and other commercial services are mainly located in locally and/or globally integrated streets depending on their size and catchment area. Shopping malls and large business parks tend to cluster nearby globally integrated streets, while locally well-integrated, lively streets are a suitable location for small-scale commercial activities. “Shops locate themselves where most people move.” (Van Nes, 2008, p.30) The most vital shopping areas are situated along streets which are globally and locally well-integrated. Globally integrated streets are mostly well-accessible by

car, while the locally integrated are also well-accessible for pedestrians, the most vital streets are well-accessible by car, bicycle and by foot as well as by public transport. Spatially segregated streets by the way tend to be residential streets and are mostly situated in dwelling areas.

We have to keep in mind that movement and attractors influence each other in both ways actively. So locating activity at a certain spot can lead to liveliness. Yet not every location is suitable for the development of commercial activities. In order to search for locations that have, apart from the program, the physical properties to become a lively and vital commercial and economic success, research by the use of space syntax has proven to be very useful.

Of course space syntax has its limitations. The liveliness and vitality of urban areas also depends on the character of a place and on architectural styles (Van Nes, 2008). These are aspects that have to be taken into account when doing research on urban areas and need to be researched by other means such as site visits and other types of spatial urban analysis. The character of a place can be described through pictures. Other relevant issues when talking about measuring the economic and social vitality of urban areas are the socio-economic circumstances in Rotterdam-Zuid.



[1a] axial analysis showing global integration of Haarlem (Van Nes, 2008)

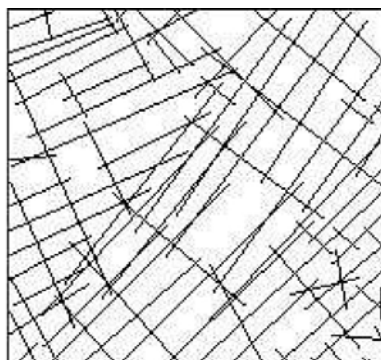


[1b] axial analysis showing local integration of Haarlem (idem.)

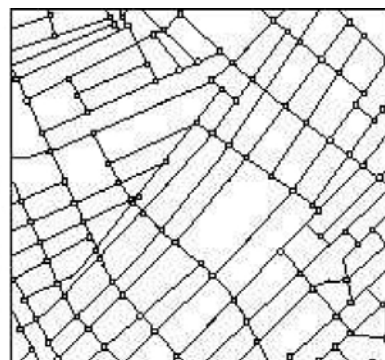


[1c] angular analysis showing the main streets of the city (idem.)

[2] the difference between axial and angular representation (idem.)



Axial representation



Segment representation

Appendix 2: overview of local visible economy of Rotterdam-Zuid

Location	Absolute figures								Relative (%)	
	Retail	Consumer	Commercial	Cultural	Commerce	Social	Total	Vacant		
Beijerlandselaan en Streijensestraat	78	24	19	0	121	4	125	9	380	19,5%
Groene Hilledijk	64	23	10	0	97	2	99	8	303	16,0%
Slaghekstraat	8	11	3	0		7		0		
Hilledijk	10	6	1	0		0		1		
Boulevard Zuid area	160	64	33	0	257	13	270	18	288	40,0%
Pretoriaaan	19	13	6	1		3		3		
Paul Krügerstraat	22	13	2	1		1		6		
Afrikaanderplein	0	1	0	0		3		0		
Bloemfonteinstraat	2	2	0	1		1		2		
Afrikaanderplein area	43	29	8	3	83	8	91	11	102	10,8%
Vuurplaat area	18	11	3	0	32	3	35	0	35	4,5%
Laan op Zuid	0	1	21	1		6		0		
Lodewijk Pinscoffsweg	0	0	5	3		5		0		
Stieltjesstraat	2	0	3	0		0		2		
Laan op Zuid area	2	1	29	4	36	11	47	2	49	0,5%
Oranjeboomstraat	13	11	11	4	39	11	50	2	52	3,3%
Entrepothaven	9	14	9	1		2		2		
Stieltjesstraat	1	5	1	0		2		1		
Entrepot	10	19	10	1	40	4	44	3	47	2,5%
Hillelaan	4	9	2	1		4		2		
Maashaven	1	4	1	0		4		0		
Hillelaan-Maashaven	5	13	3	1	22	8	30	2	33	1,3%
Dordtselaan	27	29	22	0	78	2	80	2	82	6,8%
Putselaan	16	19	17	1	53	7	60	5	65	4,0%
Sint-Andriesstraat en Oleanderplein	9	6	9	6		5		3		
Putsebocht	18	17	9	1		11		4		
Bloemhof-Noord	27	23	18	7	75	16	91	7	98	6,8%
Polderlaan-Hillevliet	16	11	8	1	36	12	48	7	55	4,0%
Strevelseweg	15	17	13	4		13		4		
Bree	5	8	1	0		6		1		
Strevelsweg-Bree	20	25	14	4	63	19	82	5	87	5,0%
Riederlaan	7	6	5	0	18	3	21	3	24	1,8%
Subtotal	364	261	181	26	832	117	949	67	1016	
Industrial business parks	16	12	10	1	39	3	42	5	47	4,0%
Other	20	18	21	2	61	59	120	16	136	5,0%
Total	400	291	210	29	930	179	1109	88	1197	100,0%
Total	33,4%	24,3%	16,8%	2,4%		15,0%		7,4%	100,0%	
Service	36,1%	26,2%	18,1%	2,6%		16,1%	100,0%			
Commerce	43,0%	31,3%	21,6%	3,1%	100,0%					

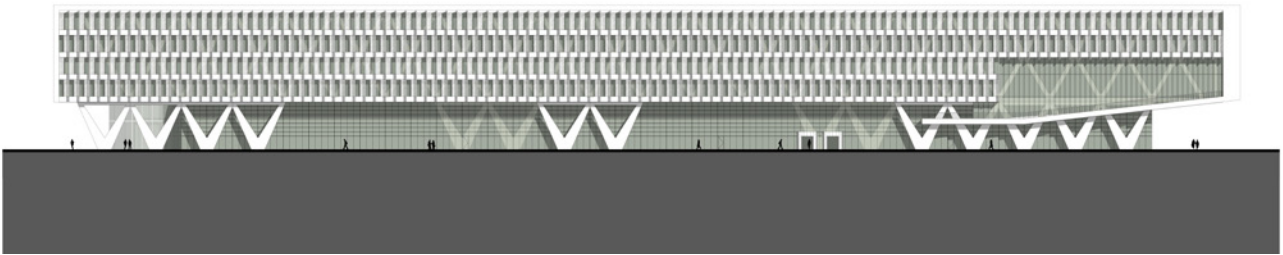
percentage of total per sector)

Consumer	Commercial	Cultural	Commerce	Social	Total	Vacant
8,2%	9,0%		13,0%		11,3%	10,2%
7,9%	4,8%		10,4%		8,9%	9,1%
22,0%	15,7%	0,0%	27,6%	7,3%	24,3%	20,5%
10,0%	3,8%	10,0%	8,9%	4,5%	8,2%	12,5%
3,8%	1,4%	0,0%	3,4%	1,7%	3,2%	0,0%
0,1%	13,8%	13,8%	4,1%	6,1%	4,2%	2,3%
3,8%	5,2%	13,8%	4,2%	6,1%	4,5%	2,3%
6,5%	4,8%	3,4%	4,3%	2,2%	4,0%	3,4%
4,5%	1,4%	3,4%	2,5%	4,5%	3,0%	2,3%
10,0%	10,5%	0,0%	8,4%	1,1%	7,2%	2,3%
6,5%	8,1%	3,4%	5,7%	3,9%	5,4%	5,7%
7,9%	8,6%	24,1%	8,1%	8,9%	8,2%	8,0%
3,8%	3,8%	3,4%	3,9%	6,7%	4,3%	8,0%
8,6%	6,7%	13,8%	6,8%	10,6%	7,4%	5,7%
2,1%	2,4%	0,0%	1,9%	0,0%	1,9%	3,4%
4,1%	4,8%	3,4%	4,2%	1,7%	3,8%	5,7%
6,2%	10,0%	6,9%	6,6%	33,0%	10,8%	18,2%
100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

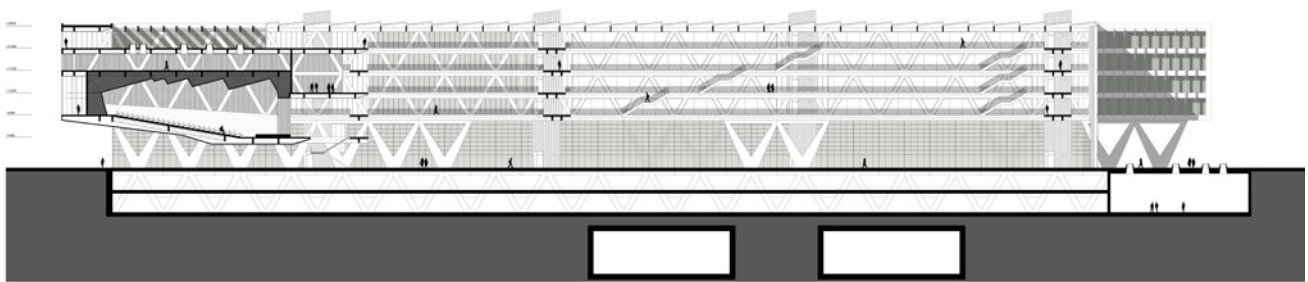
Relative (percentage of total businesses per sector)

Retail	Consumer	Commercial	Cultural	Social	Vacant
58,2%	17,9%	14,2%	0,0%	3,0%	6,7%
60,0%	21,5%	9,3%	0,0%	1,9%	7,5%
55,6%	22,2%	11,5%	0,0%	4,5%	6,3%
42,2%	28,4%	7,8%	2,9%	7,8%	10,8%
51,4%	31,4%	8,6%	0,0%	8,6%	0,0%
4,1%	2,0%	59,2%	8,2%	22,4%	4,1%
25,0%	21,2%	21,2%	7,7%	21,2%	3,8%
21,3%	40,4%	21,3%	2,1%	8,5%	6,4%
15,2%	39,4%	9,1%	3,0%	24,2%	6,0%
32,9%	35,4%	26,8%	0,0%	2,4%	2,4%
24,6%	29,2%	26,2%	1,5%	10,8%	7,7%
27,6%	23,5%	18,4%	7,1%	16,3%	7,1%
29,1%	20,0%	14,5%	1,8%	21,8%	12,7%
23,0%	28,7%	17,0%	4,6%	21,8%	5,7%
29,2%	20,7%	20,8%	0,0%	12,5%	12,5%
34,0%	25,5%	21,3%	2,1%	6,4%	10,6%
14,7%	13,2%	15,4%	1,5%	43,4%	11,9%
33,4%	24,3%	16,8%	2,4%	15,0%	7,4%

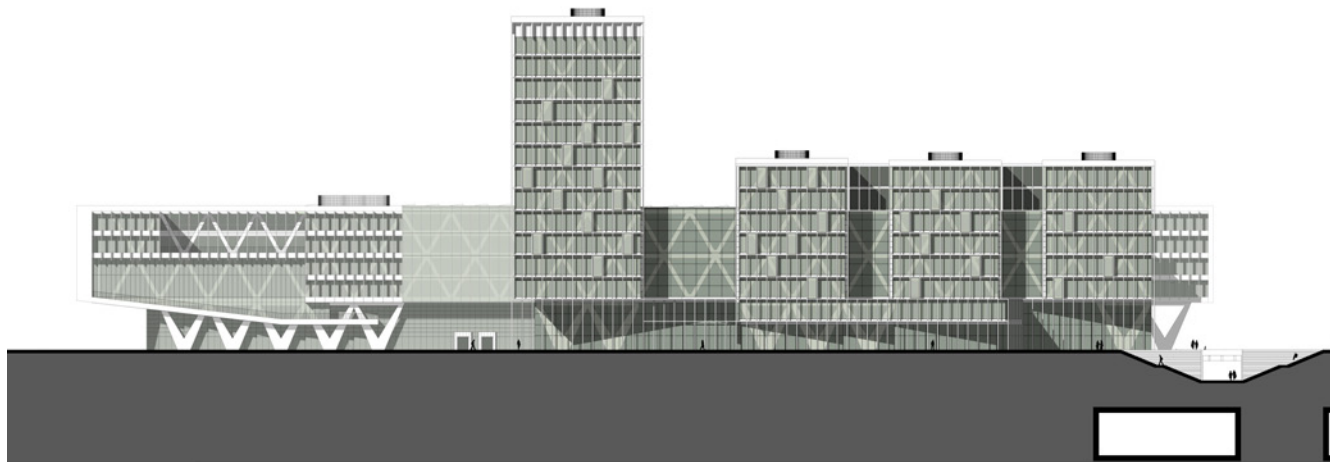
Appendix 3: plans and images of the 'hybrid' building



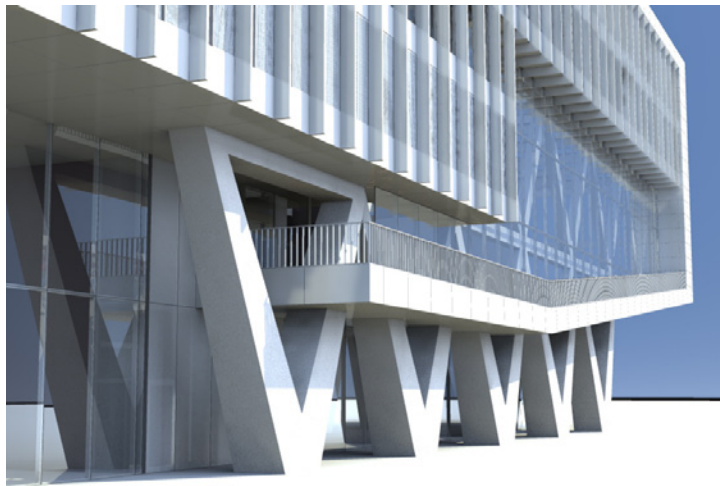
south elevation



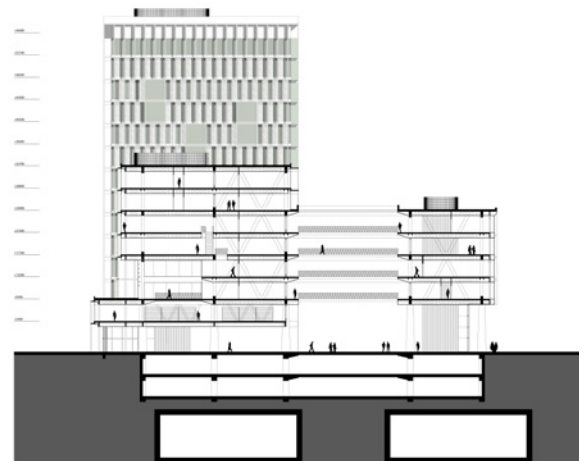
east-west section



north facade



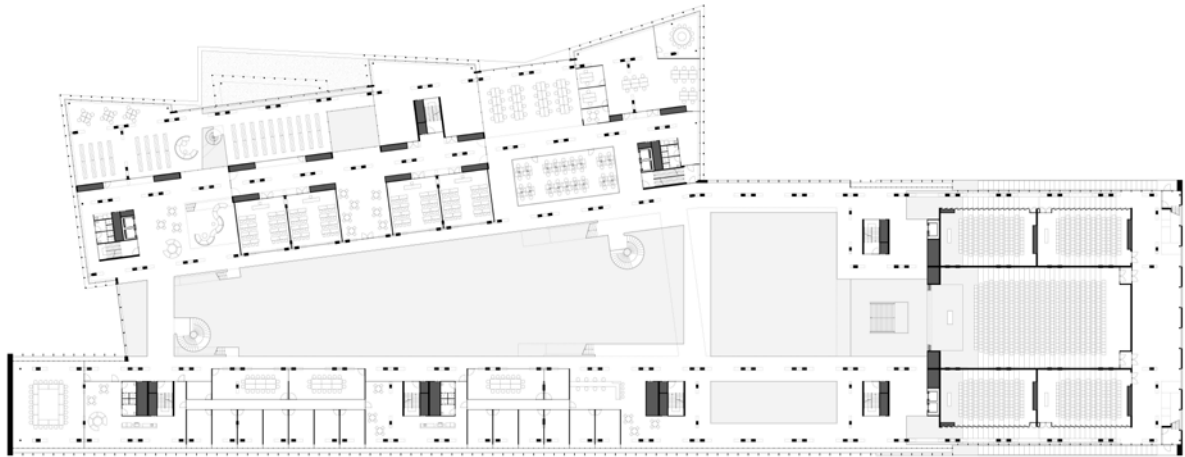
detail of south facade



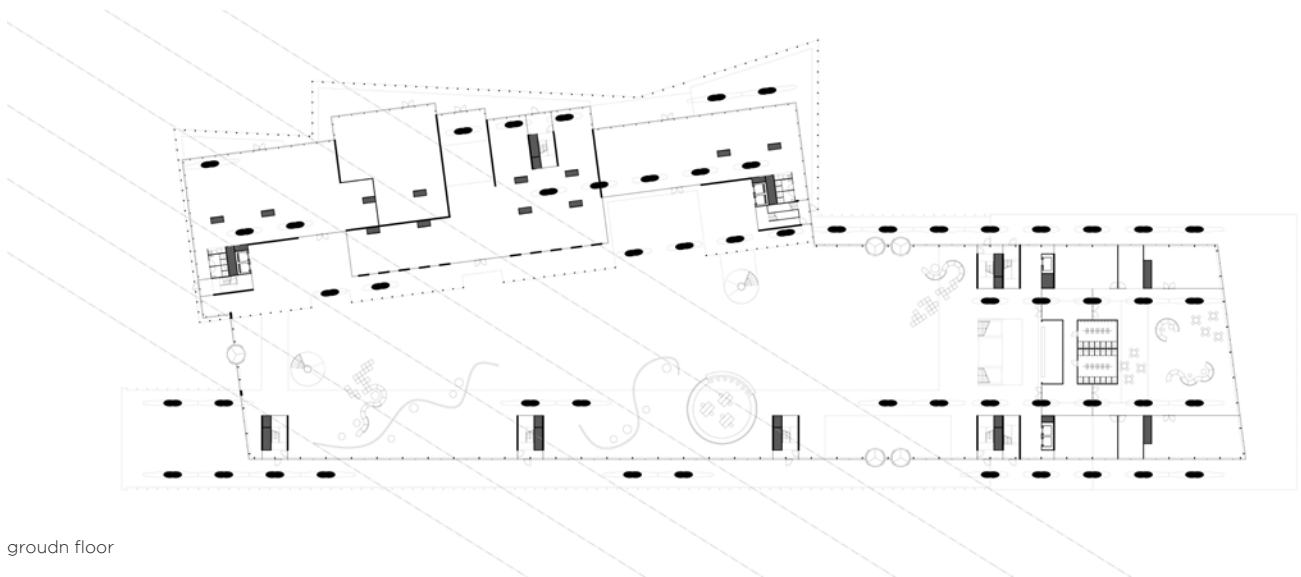
north-south section



2nd floor



1st floor



groudn floor

Chances for creative talent in Parkstad Rotterdam

URBAN REGENERATION IN ROTTERDAM ZUID BASED ON
THE DEVELOPMENT OF A VITAL LOCAL CREATIVE ECONOMIC CLUSTER

Maarten Caspers

TU DELFT

