Towards the Empowerment of the Deprived

Urban Transformation by Socio-Economic Empowerment in Rotterdam South

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Acknowledgment

This master thesis is a result of one hard working and enjoyable academic year which helped me to go deep into the subject that I have always loved to explore as an Urbanist; the effect that Urban planning and design could have on changing the socio-economical status of the lower social classes of the society. This project couldn’t be fulfilled without the great guidance of my mentors, my first mentor Birgit Hausleitner who was always a big supporter and the one who helped me in the hard times with her brilliant ideas. Not only her knowledge, but also her effort to promote my courage and confidence in this process is appreciatable. Also my great thanks to my second mentor Qu Lei who made the work easier with her smart suggestions which were always inspiring for me and made me think deeper in different stages of the project. Above all my gratitude to my parents and my brother who have always been supportive in this journey and helped me to deal with the hard times being far away from my home country. I would like to thank my best friend Sahar whom her support and understanding was always with me. Last but not the least, I need to say thanks to my dear friends in Tudelft: Pui, Wenwen, Maria, Felix and a lot of others who made everything easier for me from the first steps in Q1 till the last moments. Overall these two years in TuDelft was a great experience for me, hope that the other steps of my life will be as good as these ones.
1. Introduction to Research

This chapter will present the main components of the thesis; starting with the motivation and a brief introduction, the problem field will be presented by some analysis supporting by theory review which the output of it will be the problem statement and the research question of the thesis. In addition to this, the methods which are going to be used for answering the research question is explained in this chapter, also the relevance of the topic and the time planning is presented in the end of the chapter.
1.1 Introduction

‘Over the past decades most of the advanced countries in the world have all gone through a process of economic restructuring that is frequently assumed to be strongly associated with the process of globalisation. Improved technological conditions have led to a growing interconnectedness and internationalisation of firms and economical processes, which are expressed in the in the rapid growth of flows of people, money and goods across the world’ (Musterd, 2002, p.3). One of the main characteristics of this restructuring is the increase in the demand for high-skilled jobs and the growth in the number of unemployed and low-skilled or un-skilled people. Overall these changes lead to the increase of socio-economical polarization in the cities, which is about the growth of the distance between the bottom and top end of the social ladder. In other words it makes the increase in the proportion of low-skilled and high-skilled jobs at the same time (Musterd & Ostendorf, 1998).

The concept of social polarisation was raised by Saskia Sassen for the first time (Hamnett, 2001). She argues that the change in the economic structure of global cities, which is mainly about the increase of the business services and decrease of the industrial-based economy, leads to the polarisation of income and occupational distribution of workers which makes a drastic deviation of social classes (Sassen, 1991, p.9; Hamnett, 2001). This phenomena is more complicated because in addition to the social class deviations, other kind of deviations like racial and ethnic polarisation also exist which shows itself in the spatial structures of the cities in a way of segregation patterns (Musterd & Ostendorf, 1998).

Messy and Denton argue that the spatial segregation of the people with different social classes, leads to a situation in which access to jobs, good education and sufficient social relations among people wont be a casual value of the cities any more. spatial deviation of deprived people creates the structural conditions for the development of a kind of counterculture in which a job, good education and strong relations between people are no longer part of the prevailing system of values and norms (Musterd & Ostendorf, 1998).

This phenomena could also be implied to the Netherlands which is facing some of the consequences of the socio-economical polarisation especially in it’s big cities. The next chapter is dedicated to this issue and explores the consequences of it in one of the biggest cities of the Netherlands as the introduction for the problem statement of this thesis.

Picture1- Saskia Sassen- http://urbanchoreography.net
1.2 Problem Field Introduction

According to the Eurocities-NLAO, Rotterdam is the second largest city of Netherlands after Amsterdam. The population of this city which has been increasing in the recent years is about 617000 and the regional population of it is about 1.2 million. The biggest port in Europe is located in this city which makes it an important international trade spot in Europe. The city has a considerably multicultural population because about 50 percent of the inhabitants have a migrant background. One of the important facts about this city is the high rate of unemployment of it which is 8.3%. Most of the unemployed people in in Rotterdam live in the South part of the River. The population of South bank is 20000 which 13000 of them are searching for jobs and a high percentage of people in this part of the city are on low levels of the social ladder which makes them depend on the income support by the government (Eurocities-NLAO, 2011).

The spatial concentration of low-income and unemployed people in this part of the city has a historical reason; the harbor was located in the South part of the river in the 20th century and as mentioned above it was an important trade centre which attracts a lot of workers for working in the harbor, but after the de-industrialization the harbor provided fewer jobs and it moves westwards, the result was the high number of workers who lost their jobs. At that time the people who could afforded to go to other parts of the city left and only the people who couldn’t afford to do so, remained in this part of the city. So Rotterdam South becomes the concentration spot of low-income and disadvantaged groups (Eurocities-NLAO, 2012).

The concentration of disadvantaged groups and the polarisation that come afterwards is not only the consequence of historical changes but also the influence of urban policies and as a direct result of certain processes, like changes in the welfare structure urban planners and managers desicions (Musterd & Ostendorf, 1998). In the next part this problem will be explained more.

Map1- Spatial location of Rotterdam south in the Rotterdam region- By author

Map2- Unemployment percentage per neighborhood- https://www.ucl.ac.uk/silva/ineqcities

Map3- Low educational percentage per neighborhood- https://www.ucl.ac.uk/silva/ineqcities

The concentration of disadvantaged groups and the polarisation that come afterwards is not only the consequence of historical changes but also the influence of urban policies and as a direct result of certain processes, like changes in the welfare structure urban planners and managers desicions (Musterd & Ostendorf, 1998). In the next part this problem will be explained more.
Problem Field - Rotterdam South through the history

New constructions in Rotterdam south related to the harbour and the industry there. At this time port of Rotterdam was the main trading spot in the Netherlands due to its geographical location (http://www.portofrotterdam.com)

Further developments related to the harbour and adding dwellings for the workers.

This part of the city was one of the main priorities for new constructions during 1940 and 1950 which caused an increase in the economic activities in the Southbank area. This resulted in a massive influx of new workers from the Netherlands southern province, so low-cost housing was built to accommodate the new generation of dock workers (Eurocities, Demographic change in Rotterdam, 2012).

First waves of globalization make the peoples flock from Turkey and Morocco to Rotterdam port for finding a job, but then the de-industrialization took place, so the harbour was not an economical driven force anymore. Because of the low price of the housing immigrants come to this part more and more.

This part of the city becomes the spatial concentration of low-income people and immigrants

Harbour the economical and spatial driven force at this time

Flow of low-income immigrants for working in the harbour

Harbour not an economical driven force anymore
According to Van Eijk (2010), urban poverty could be defined as a situation in which a special group don’t have access to resources, which could be job opportunities, information, health care, leisure,... (Van Eijk, 2010). Greene (1991) argues that the concentration of urban poverty is about the agglomeration of poor people in a particular part of the city instead of the spatial distribution of these groups in the whole city (Orford, 2003). Poverty concentration is an important urban issue because it has considerable effects which are mainly negative; it leads to the isolation of the disadvantaged groups from the social and economical mainstream which could be followed by social exclusion and segregation. For example people living in the concentration of poverty areas are facing with higher rates of crime in their living area, less opportunities for education and employment and overall they deal with more socio-economical issues that part of it is because of the spatial concentration of the poor (Orford, 2003).

‘Spatial concentration of deprived groups has different causes, it could be considered as a product of structural factors in cities and of descisions taken by individual housholds; In their research for location people choose between places that have different percieved qualities regarding housing, physical and social environment, access to transport, jobs, services, natural beauties, and status and cultural identity’ (Andersen, 2004, p.3).

The uneven distribution of the urban qualities in the spatial structure of the city could intensify the gap between good and bad areas which will lead to more segregation because the motivation for house seekers to ignore or choose some areas will increase(Andersen, 2004).

This segregation leads to a considerable decline of some parts of the city which will become no go areas and the middle and high-income classes will refuse to live in these neighborhoods. This phenomena will follow by a downward spiral and a self-perpetuating process for these segregated areas (Andersen, 2004). This process could be divided to two parts: Interior process which is taking place inside the deprived neighborhood itself and Exterior process:

‘The interior process of deprivation in neighborhoods concerns the changes in the conditions inside the estate, where negative social, physical, organizational and financial changes reinforce each other while the exterior process have to do with how the changes in the image and attraction of the estate influence the relations to the rest of the city. In short negative changes in the qualities and resources of neighborhoods have a negative influence on the flow of capital and the people in and out of the neighborhoods. This result in middle class people will move away and will replace by poor people and the investment in maintenance and services will reduce and this process will repeat in a cycle because the average cost of the estate will decrease drastically and it will attract only low-income people’ (Andersen, 2004, p.6).

Overall it could be concluded that there is a relation between the spatial concentration of disadvantaged groups and socio-economical polarisation of the city which is simplified in the diagram below; a balanced city (system) included diverse neighborhoods although there is no big gap in terms of the socio-economical between these neighborhoods, but when a part of the city become the spatial concentration of poor people the socio-economical quality decline in that part of the city and this will make polarisation in the city.

Problem Field
Spatial concentration of poverty, Causes & Consequences

Diagram 1- Socio-economical polarisation in the city in relation to deprivation of some neighborhoods- By author
Big circle: Normal neighborhood
Small circle: Deprived neighborhood
Color of the circle: Characteristic of the neighborhood
Lines: Socio-spatial-economical interaction
1.2.1 Problem Analysis

Socio-economic polarisation

As mentioned in the former page this spatial feature (concentration of poverty) could contribute to some socio-economical weaknesses which will be analysed in the case of Rotterdam South in this part. The map above shows the average income per year for Rotterdam residents in different districts. The lighter blue the district is the lower income is located, there is a drastic gap between northern part of the city and southern part of it; uneven distribution of deprived social classes. This phenomena could have affected the social and economical gap between north and south. In the following other socio-economical aspects has been analysed to see if this distinction does exist in the other layers of the city or not.

According to the map number 6, the number of shopping centres in Rotterdam North and Rotterdam South are also very different. As Vannes (2012, p.2) mentioned, ‘The economic centre of Rotterdam with new offices and shopping centres are located in the city’s northern part, while the southern part consists of several detriorated neighborhoods and urban centres’.

As it has shown in the map above the houses with bigger sizes (which could be the representer of a more wealthy typology of housing) are concentrated in the North bank, Blue dots represent the houses with size of 150-250 m² which are more wealthy houses. This spatial feature is one of the reasons for the concentration of higher income people in the north part and lower income in the southern part. This issue will be explained later.

In addition to this homogenity in the dwellings of Rotterdam south which most of them are pre-war affordable housing is a factor that makes this part of the city the magnet for low-income people, intensifying the polarisation between north and south part of the city.
As Hillier suggests ‘the city is essentially two things: a physical sub-system, made up of buildings linked by streets, roads and infrastructure; and a human sub-system made up of movement, interaction and activity - the physical city and the social city’ (Charalambous, 2011, p.2). The spatial aspect and socio-economical aspect are related to each other. The relation between social aspect of the city and the spatial aspect of it should be recognized as a two-sided one; the spatial patterns could provide opportunities or barriers for societal actions and on the other hand the spatial patterns are affected by different actors in the society (Abu-Lughod, 1999; Buck and Gordon, 2004; Cassier & Kesteloot, 2012). The way in which spatial inequalities reinforce social unevenness has been researched at different levels (Cassier & Kesteloot, 2012). The one which is more applicable to this thesis is the one which is more concerned about this issue in the neighborhood scale; The spatial concentration of people with the same (low) social profile in Rotterdam South neighborhoods reduces the chances for the people living their to promote their social level and as it has shown by brief analysis in this part, this poverty concentration will also make a decline in the spatial and functional quality of the neighborhoods. Overall in Rotterdam South a spatial phenomena which is the concentration of deprived peoples is followed by socio-economical phenomena which is the polarisation of north and south part of the city. So for making a change in this situation we have to consider this phenomena as an interaction between spatio-functional and socio-economical forces.

**1.2.1 Problem Analysis**

**Spatio-Functional Polarisation**

The uneven distribution of various income groups could also relate to the land-use distribution of Rotterdam. According to the map in the north part of the river high rate of mix-use could be realised while the southern part has less multi-functionality and is more occupied by dwellings. This feature will be not only a tackle for attracting the middle and high-income people to Rotterdam South but also will lead to less socio-economic activity of south part, a fact that could intensify the polarisation.

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**Conclusion**

As Hillier suggests ‘the city is essentially two things: a physical sub-system, made up of buildings linked by streets, roads and infrastructure; and a human sub-system made up of movement, interaction and activity - the physical city and the social city’ (Charalambous, 2011, p.2). The spatial aspect and socio-economical aspect are related to each other. The relation between social aspect of the city and the spatial aspect of it should be recognized as a two-sided one; the spatial patterns could provide opportunities or barriers for societal actions and on the other hand the spatial patterns are affected by different actors in the society (Abu-Lughod, 1999; Buck and Gordon, 2004; Cassier & Kesteloot, 2012). The way in which spatial inequalities reinforce social unevenness has been researched at different levels (Cassier & Kesteloot, 2012). The one which is more applicable to this thesis is the one which is more concerned about this issue in the neighborhood scale; The spatial concentration of people with the same (low) social profile in Rotterdam South neighborhoods reduces the chances for the people living their to promote their social level and as it has shown by brief analysis in this part, this poverty concentration will also make a decline in the spatial and functional quality of the neighborhoods. Overall in Rotterdam South a spatial phenomena which is the concentration of deprived peoples is followed by socio-economical phenomena which is the polarisation of north and south part of the city. So for making a change in this situation we have to consider this phenomena as an interaction between spatio-functional and socio-economical forces.

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![Diagram2- Interaction between spatial and socio-economical layer-By author](image)
1.3 Problem Statement

Spatial concentration of deprived groups in Rotterdam south neighborhoods intensifies the socio-economical polarisation of the city.

Socio-economical polarisation in the cities has a spatial dimension; the concentration of disadvantaged groups in certain geographical areas is a fundamental part of socio-economical decay which will increase the deprivation of a part of the city. This deprivation leads to decrease in the price of housing and socio capital in these areas and attracts more excluded social groups which will lead to a downward spiral increasing the distinction of the area from the other parts of the city (Andersen, 2004). In Rotterdam south this spatial concentration could be seen as a result of mono-functionality of this area in the last decades; as it has mentioned in the problem field this part of Rotterdam was constructed for accommodation of dock workers but as the port activities gradually moved westwards and with changes in the work of the port such as the advent of containers, the docks offered fewer employment opportunities for South bank residents: The port was no longer an employer, so this part becomes the concentration of low-income or unemployed people, as a result the authorities focused on other areas (specially north bank) as centers of urban economic growth, with more attractive housing and a better urban environment than south bank which intensified the non-multi functionality and socio-economical descent of this part of the city. This problem could be confronted in two different ways: one will focus on the concentration of the disadvantaged groups which will follow by de-concentration of this group as a solution for decreasing the negative effects of their centralization while the other will focus on the disadvantaged groups concentration and will focus on empowering them in order to enhance their socio-economical situation. In my thesis I will focus on the second one which could be a driven force for changing the socio-economical situation of these disadvantaged groups.

1.3.1 Research Question

Which spatio-functional strategies will contribute to the socio-economical transformation leading to the empowerment of deprived groups in Rotterdam South neighborhoods?

As it explained in the previous parts, there is an interaction between the socio-economical layer of the city and the spatio-functional layer of it. So these two could influence each other. In this thesis the main focus will be on finding a strategy which could improve the social and economical status of the low-income or unemployed residents of Rotterdam South neighborhoods and this strategy will mainly use spatial and functional interventions for making this change. In other words the main tool for the empowerment of people in these deprived neighborhoods will be the spatial and functional (programmatic) changes. The sub-research questions which will help me to achieve the answer to the main research question, step by step, is explained in the next page.
1.3.2 Sub-Research and Design Questions

1. What are the socio-economical and spatio-functional characteristics related to deprivation of Rotterdam South neighborhoods?

Methodology:
Answering to this sub-research question will be done by mapping different spatial and functional features of the four neighborhoods of study in Rotterdam South, like public transport accessibility, building typology of the neighborhoods, quality and quantity of the public spaces and the land-use map of the neighborhoods. This analysis will combine with reviewing the social and economical statistics like rate of unemployment, housing value, percentage of immigrant and other social indicators. In addition to this, some literature review will be done in this part which is explained in the theoretical framework and observation of the area of study and taking pictures from the spatial features of the area will be another method for achieving a holistic understanding of the characteristics of the

2. How the socio-economical deprivation of Rotterdam South does relates to the Spatio-functional features of the area.

Methodology:
Answering to this question will be done mainly by literature review about the neighborhood effects of the concentrated poverty for understanding the features of deprived neighborhoods and the relation between socio-economical and spatio-functional characteristics of deprived areas. In addition to this mapping the spatio functional analysis of the neighborhoods of study in Rotterdam South will be done in more details, for example, the number of small businesses, offices, ... will be explored to understand if they are affected by the deprivation of the neighborhood. In this part of the thesis, spatio-functional problems and potential will be explored by a SWOT analysis which will help to understanding the necessary areas of focus in the proposal Design.

3. Which strategies will facilitate the transformation of deprived neighborhoods leading to the socio-economic empowerment of the people?/ by special focus on spatio-functional strategies.

Methodology:
For achieving a holistic answer to this sub-research question, a review of the strategies for the neighborhood transformation of Dutch deprived neighborhoods will be done to understand different approaches and the main areas of focus in this kind of interventions. In addition to this the reference projects about the neighborhood empowerment will be reviwed. In addition to this interview for understanding the needs and demands of the inhabitants will be another method for achieving the answer to this sub-research question. The other method is reviewing literature about the ways of empowerment of deprived groups mainly by spatial and functional (programmatic) changes.

Key Words

- Deprived Concentration
- Rotterdam south neighborhoods
- Socio-Economic transformation
- Empowerment
- Spatio-functional interventions

*It is necessary to mention that the area of focus for this thesis will be four neighborhoods of Rotterdam South; Afrikaanderwijk, Bloemhof, Tarwewijk and Carnisse.*
1.4 Theorical Framework

Theorical framework in this project is based on three main pillars which will lead me step by step towards a proposal strategy for the socio-economical transformation of the neighborhoods of study by spatio-functional interventions. In the following these three parts are explained:

1. Spatial Concentration of Deprived groups

The main focus of this part will be on the **causes and consequences** (negative and positive effects) of the concentration of disadvantaged groups in residential neighborhoods which will be done by reading literature mainly by Ronald van Kempen and Gideon Bolt. The main focus in this part will be on the social and economical aspects of the concentrated poverty. In addition to this a part of this research will focus on the multiculturality of these deprived people.

As a result, a holistic understanding of the **problems and potentials** in Rotterdam South neighborhoods of study will be achieved which will lead me in the next part of literature review which is explained below.

2. Deprived Neighborhood transformation

This part of the theory will review the different strategies for the transformation of deprived neighborhoods in the Netherlands from the middle of 20th century till the last decades. The aim of this part is to gain a holistic overview of different areas of focus and approaches for making a socio-economical transformation in concentrated of poverty neighborhoods.

The result of this part will be a proposal approach for tackling the problems in concentrated of poverty neighborhoods and it will explain why the socio-economical empowerment will be a sufficient tool for making the transformation of these areas. It should be mentioned that the main authors that are being considered in this part are Paul Stouten and Rendon.

3. Neighborhood Empowerment

This part of literature review will first provide a clear definition of empowerment, and then it will focus on different kind of empowerment in a neighborhood. In addition to this the role which empowerment can play in the transformation of deprived neighborhoods will be explored. This part will be followed by introducing different ways of socio-economical empowerment of deprived groups which will provide a basis for the proposal strategy and the areas of focus in the design part. In the diagram below the main pillars of the theoretical framework in relation to the main authors is shown.

![Diagram 4- Conceptual diagram for the Theorical Framework, By Author](image-url)
1.5 Methodology

The methodological structure of this thesis is shown in the diagram number 5. For each part different methods has been used which has been explained in the previous pages. As it is obvious from the diagram, the first part of the thesis will be done by both Analysis and Research. The research part will be done mainly by reading literature and the analysis will focus on the socio-economic statistic while the analysis part will be done by mapping spatial and functional features of the area of study. The output of this part will be both theory paper and a Framework for the proposal strategy. The next step after this, will be pattern making which is the most important method that is used for transferring the research to some design interventions. The final design interventions which will be presented by maps, 3D models and variety of impressions.

Diagram 5- Proposal Methodology and steps of the thesis, By Author
1.6 Outputs of the project

This thesis plan will be a combination of planning and design and the outputs of the project will be in three different stages, as it has explained in the following:

Proposal patterns
The output of the research and analysis will be some proposal patterns as a bridge between the research and the design. These proposal patterns as it will be explained later will be in very different scales of performances; from policies to planning and design.

Strategic plan
The result of the proposal patterns implementation will be the proposal strategic plans in different phases which will also consider the stakeholders and actors which are needed to be involved for fulfilling the strategy.

Design Interventions
The design proposal which is a transformation of the master plan to more detailed designs will be the final output if this thesis.

1.7 Design Goal

This thesis will be done in 2 main chapters; one is the theory chapter which the framework of it has been explained in the previous pages and the other part will be the design which is about transforming the proposal strategy to a spatial context. The main goal of the design will be translating the proposal strategy for the socio-economical empowerment of the people living in deprived neighborhoods to spatio-functional proposal interventions. This part will consider different spatial elements in different scales, like buildings, blocks, streets, public spaces, ... as a context for economical and social activities which will be done by exploring the interaction between the spatial and socio-economic layer in the neighborhoods of study.

In addition to this in the design part some principles will be proposed which could be applied and implemented to other Dutch problematic neighborhoods because the deprived neighborhoods in the Netherlands have more or less the same spatial and socio-economic features like the concentration of pre-war housing typologies, high rate of immigrants, low rate of private-owned houses, high rate of low-income people, ... . So the design principles could be transformed to other areas as well.
1.8 Relevance

1.8.1 Societal relevance
Rotterdam South neighborhoods has gain a lot of attention both from the government and the municipality of Rotterdam because of the existing social and economical problems in these areas. Improvement of these neighborhoods both in the socio-economic and the spatial aspect becomes one of the VIP projects of Rotterdam municipality for the vision of 2030.
The municipality of Rotterdam with the help of Veldacademie has invested on the transformation of these areas and a national programme is defined for Rotterdam South. There are different reasons for the focus on this issue. One of them is the serious social and economical problems that these areas are facing like high rate of crime, unemployment, school drop outs, .. and the other reason is because the city of Rotterdam’s vision is based on two main pillars: First: making balance in the housing composition and second: being attractive for the creative (middle) class (StadVisie Rotterdam for 2030, 2008). So the areas like Rotterdam South which are known as stigmas needs to be promoted according to the plans of the municipality and housing associations so that the whole city will be attractive for the middle class.
All of these factors are reflectors of the importance of working on these neighborhoods which could provide a better living environment for all of the people from different social classes, living in the second largest city of the Netherlands.

1.8.2 Academic relevance
Providing a better living environment for the people is the main goal of all the urban planner and designers both in the practice and the academic environment. This thesis, as explained before, is mainly focused on providing a better socio-economic situation for the deprived people and facilitating a better life for this special group. In other words it is gonig to find out how the physical built environmnet with the function of it ( programme of the building, street, public space, ...) could contribute to the socio-economic empowerment. This is in the same direction of the goal of the Urban Design Fabric group in TuDelft which is trying to propose spatial solutions towards a better quality of life in our cities. In addition to this from a more general academic point of view, reviewing the literature and research about the socio-economic empowerment of the deprived could be in the same direction of serious issues of not only Urbanism, but also the Social science, Economic science and even politics.
1.8.3 Graduation Orientation

The topic of this graduation thesis is related to both Spatial Planning theme and the urban Design Fabric because the main goal of it is to make a socio-economical transformation in some of the deprived neighborhoods of Rotterdam South which could be realized only if the issue will consider in both the planning and design scale. In other words for achieving a proper strategy for facilitating the social and economical empowerment, which is the main goal of the transformation mentioned above, in one hand it is necessary to understand the problems and potentials of the deprived neighborhoods of study from a more planning point of view which the output of it will be some proposal change in the policies while the other level will be proposing some spatial and functional instruments which leads to the socio-economic empowerment of deprived groups. From the point of view of the author of this thesis there is no strict border between the planning and design in urbanism field so it is not right to say that this thesis is 100 percent fits to this graduation theme or the other one, but I do picked the Urban Design fabric because my main issue is to find out how the physical built environment with the function of it (program of the buildings, street, public space, ...) could contribute to the socio-economic empowerment. This is in the same direction of the goal of the Urban Design Fabric group in TuDelft which is trying to propose spatial solutions towards a better quality of life in our cities. In addition to this the sub-research questions that are proposed which will help me towards answering the main research question have both planning and design contexts but the main step or the main issue in these sub-research questions has a more spatial context and is more related to the urban fabric. In the following this will be clarified by explaining the sub-research questions and the way they are related to the urban design fabric issues:

The references used for answering these sub-research questions are gathered in a way to consider the attitude of both planners and designers, it starts from Saskia Sassen, a pure planning theorist in order to clarify the main phenomena and the general issues related to the social and economical polarization and then for understanding the problems and potential in the area of study, the references have been picked from the writers who have more urban design way of thinking. These different categories of references could be the complementary of each other and they will provide a holistic understanding of the possible design solutions for the socio-economical empowerment of the deprived groups of Rotterdam South.
1.9 Timetable

Diagram7 - Proposal Time Planning of the Thesis, By Author
2. Theoretical Background

1. Deprived Neighborhoods

2. Urban Transformation

3. Empowerment
This part of the literature review will provide a clear understanding of the effects of spatial concentration of deprived groups in neighborhood level. The advantages and disadvantages of this concentration, mainly focus on the social and economical neighborhood effects will be explored. The result of this part will be a holistic understanding of the socio-economical problems and potential in deprived neighborhoods which will help me to understand the necessary areas of focus for empowering these neighborhoods which will be done in the second part of the theory chapter.
2.1.1 Introduction

According to Gross & Eggers (1991) ‘Structural conditions are features of the metropolitan environment that are beyond the control of individuals; they operate at the aggregate level to influence the fate of large numbers of people who share the same structural position’ (Harry Goulbourne, 2001, p.82). One of these structural indicators is the poverty rate of some groups in the society and the spatial segregation that is related to it. Group poverty is resulted from the cities market forces which prescribes the spatial location, availability and jobs pensions in the metropolitan labour market (Gross & Eggers, 1991; Harry Goulbourne, 2001). As Wilson (1987) mentioned poverty rates are the result of the structural transformation of urban economy during the 1970 and 1980 which leads to a drastic change in the employment customs, reduction of manufacturing jobs and the expansion of low-paying service occupations contributed to a sharp rise of poverty in most of the big cities in Western Europe (Wilson, 1987; Harry Goulbourne, 2001).

This phenomenon makes spatial changes in the cities like increase in spatial segregation of poor and rich which intensifies the social isolation of specific groups from the mainstream of the society (Musterd & Ostendorf, 1998). As Commission of the European Communities (1993) emphasized:

‘Social exclusion is now on the structural nature of a process which excludes part of the population from economic and social opportunities. The problem is not only one of disparities between the top and the bottom of the social scale, but also between those who have a place in society and those who are excluded’ (Commision of the European Communities 1993; Musterd & Ostendorf, 1998, p.94).

The commission (1993) further noted that the exclusion has effects both on the individuals and the social groups who are segregated from the mainstream society in different aspects. This exclusion could have different reasons like the change in economical structure, change in family structure or the emergence of new migration forms (Musterd & Ostendorf, 1998).

This exclusion will have spatial consequences which one of the examples of it is the appearance of deprived neighborhoods, the spatial concentration of deprived and excluded people (Andersen, 2004). As pointed out by Vaughan and Arbacci (2011), ‘the spatial concentration of special group of people in part of a city is, historically, an undeniable urban reality because cities by they nature bring together heterogeneous people and activities’ (Charalambous, 2011, p.3). This spatial concentration brings some problems which this chapter is dedicated to.

Reviewing the literature shows that a lot of different attitudes exist about the cause, consequences and the main problems in deprived neighborhoods which are even sometimes in contrast with each other, however the dominant view in European context is that the deprivation of neighborhoods are related to the segregation and social exclusion in the city (Andersen, 2004). In the following deprived neighborhoods has been explored from the point of view of different theorists.
2.1.2 Relation between segregation and deprived neighborhoods

According to Andersen (2004) and as mentioned in the introduction, the existence of deprived neighborhoods is because of the social segregation which is a trend that makes the concentration of people from lower levels of the social ladder in special parts of the cities with lower qualities (Andersen, 2004). An important factor that affects this spatial segregation is that in the search for location, people consider the accessibility to jobs, public transport, education, the social environment, .... which makes driving away of the poor people to deprived parts of the city (Andersen, 2004).

In other words ‘urban decay is a result of the interaction between social, economic and physical changes in the cities’ (Andersen, 2004, p.4). ‘Segregation is the reflection of social structure on a spatial context, in other words segregation is related to class differences in terms of, for example, socio-economic position, education, housing and political representation’ (Smet & Salman, 2008; Cassier & Kesteloot, 2012, p.1912). For understanding this issue better, it is necessary to take a look at the particular processes which shapes the spatial structure of our cities (Cassier & Kesteloot, 2012).

Van Kampen and Marcuse (1997) detected ‘three forces through which societal processes are reflected in the spatial order:
1- Variations in the capital accumulation regime and capital flows which cause a shift in location strategies.
2- Demographic changes, as work opportunities make people migrate
3- The changing role of the public sector that forces people to rely more on market strategies for access to housing, which exacerbate segregation’ (Cassiers & Kesteloot, 2012, p.1912).

In the case of Rotterdam South, all of these factors played a role in making this part of the city to be the concentration of deprivation, as explained in the first chapter the change of working structure (de-industrialization) makes a shift in flow of capital in the city and changed the location strategies from harbour and industrial spots to another parts of the city, mainly to the Northern part of the river. In addition to this the flow of low-income migrations and settling down near the harbour makes the south part concentration place of low-income and in the end as it will be mentioned later the change of responsibility of social housings from government to housing association and private sector was another important factor which intensifies the spatial concentration of low-income people and deprivation in this part of the city. 

For understanding the issue better it is necessary to understand the socio-spatial demographics of Rotterdam South in order to get a better understanding of deprivation in this part of the city and to check if a socio-economical segregation (leading to deprivation) exists in this part of the city or not. So in the following some socio-economical datas has been presented.

Socio-economical deprivation Rotterdam South neighborhoods

Many of the social problems faced by Rotterdam’s Southbank are particulary concentrated in seven disadvantaged neighborhoods which four of them are in the study area of this thesis. As mentioned before about 8.8% of the inhabitants of Rotterdam South are unemployed which is slightly higher than the local average for Rotterdam which is 8.3%, this rate arises to 11.3% for the seven most disadvantaged neighborhoods in this area (Euro cities, Demographic change and active inclusion in Rotterdam South, 2012, p.4).

Many people, living in this part, with a job are low-paid or they have part-time work. Also only 46% of the residents have completed their middle education compared with 62% for Rotterdam as a whole, and 72% nationally (Eurocities, Demographic change and active inclusion in Rotterdam South, 2012, p.4).

The table number - provides a general picture of the demographic and socio-economic situation of Rotterdam’s Southbank, compared with the average of Rotterdam.

According to the demographics, Southbank neighborhoods have lower average household income; a higher percentage of households identified as being in poverty; a higher percentage of primary school children who have parents with low or no qualifications and a higher proportion of pupils who drop out of school. In addition the security index across this area is far lower than for Rotterdam as a whole (Eurocities, Demographic change and active inclusion in Rotterdam South, 2012, p.5).
The result of these features could be seen in the map number 10 which shows the degree of livability in the neighborhoods which is in average moderate for Rotterdam South. In the following this issue has been explained particularly for the four study neighborhoods.

<table>
<thead>
<tr>
<th>Household income ('')</th>
<th>Rotterdam</th>
<th>Leavers</th>
<th>Stayers</th>
<th>Pact op Zuid</th>
<th>Settlers</th>
<th>Leavers</th>
<th>Stayers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>59</td>
<td>42</td>
<td>61</td>
<td>64</td>
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<td>73</td>
<td></td>
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<tr>
<td>Middle</td>
<td>24</td>
<td>27</td>
<td>24</td>
<td>22</td>
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<td>High</td>
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<td>31</td>
<td>16</td>
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<table>
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<th>Stayers</th>
<th>Pact op Zuid</th>
<th>Settlers</th>
<th>Leavers</th>
<th>Stayers</th>
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<td>Low</td>
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<td>18</td>
<td>26</td>
<td>22</td>
<td>27</td>
<td>39</td>
<td></td>
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<tr>
<td>Middle</td>
<td>41</td>
<td>33</td>
<td>32</td>
<td>42</td>
<td>38</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>44</td>
<td>49</td>
<td>42</td>
<td>36</td>
<td>36</td>
<td>24</td>
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<table>
<thead>
<tr>
<th>Number of workers in household</th>
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<th>Stayers</th>
<th>Pact op Zuid</th>
<th>Settlers</th>
<th>Leavers</th>
<th>Stayers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual-earner</td>
<td>23</td>
<td>39</td>
<td>25</td>
<td>25</td>
<td>33</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>One-earner</td>
<td>42</td>
<td>32</td>
<td>39</td>
<td>44</td>
<td>35</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>No earner</td>
<td>35</td>
<td>29</td>
<td>40</td>
<td>31</td>
<td>33</td>
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<table>
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<th>Pact op Zuid</th>
<th>Settlers</th>
<th>Leavers</th>
<th>Stayers</th>
</tr>
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<tbody>
<tr>
<td>Paid job</td>
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<td>74</td>
<td>63</td>
<td>69</td>
<td>65</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Pension</td>
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<td>7</td>
<td>9</td>
<td>3</td>
<td>8</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Allowance</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>19</td>
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<td>9</td>
<td>11</td>
<td>10</td>
<td>6</td>
<td></td>
</tr>
<tr>
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<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
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<td></td>
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<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>6</td>
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<table>
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<th>Leavers</th>
<th>Stayers</th>
<th>Pact op Zuid</th>
<th>Settlers</th>
<th>Leavers</th>
<th>Stayers</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>39</td>
<td>28</td>
<td>27</td>
<td>35</td>
<td>28</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>35</td>
<td>36</td>
<td>31</td>
<td>34</td>
<td>33</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>12</td>
<td>17</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>10</td>
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<td>12</td>
<td>18</td>
<td>7</td>
<td>14</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
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<th>Leavers</th>
<th>Stayers</th>
<th>Pact op Zuid</th>
<th>Settlers</th>
<th>Leavers</th>
<th>Stayers</th>
</tr>
</thead>
<tbody>
<tr>
<td>native</td>
<td>55</td>
<td>60</td>
<td>46</td>
<td>41</td>
<td>48</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>immigrant</td>
<td>45</td>
<td>40</td>
<td>54</td>
<td>59</td>
<td>52</td>
<td>61</td>
<td></td>
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<tr>
<td>Dutch</td>
<td>55</td>
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<td>46</td>
<td>41</td>
<td>48</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Western non-Dutch</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Non-western</td>
<td>38</td>
<td>25</td>
<td>45</td>
<td>51</td>
<td>45</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>

Table 1- Selective Migration process of Rotterdam, For Rotterdam as a whole and three Rotterdam South bank Districts, COS Rotterdam, adaption by Rene Keijzer, Demographic change and active inclusion in Rotterdam: 2012

Some of the socio-economical indicators has been surveyed for Rotterdam south neighborhoods by the Centre of Research and Statistics (COS) of the municipality of Rotterdam, they developed a model which has scored these neighborhoods in four values; safety, income, social and house value. The scores are set in relation to the average of Rotterdam (Waaier van Wijken, Trends in Rotterdam, 2010). These models are presented for the four neighborhoods of study (check diagram 8). As it is obvious there is a considerable difference between these indicators for these four neighborhoods and the average rate (compare the area of the rectangle with green line and the blue line). Specially for neighborhoods of Carnisse and Afrikaanderwijk the difference is high which could be translated to deprivation of these neighborhoods in the socio-economical aspect.
Overall according to the descriptions in the previous page and the diagram above, a socio-economical deprivation and socio-economical segregation exists in Rotterdam South neighborhoods. This deprivation could be recognized mainly in the high number of unemployment, low housing value and the low degree of education.

Another factor that is needed to be explored is the spatial factor. In the following some analysis is done to understand if there is any spatial segregation of these neighborhoods in terms of connectivity and accessibility by the public transport or not. This is crucial for understanding the factors that are the reason or are intensifying the deprivation of this part of the city.
No spatial segregation

Map 13- Accessibility by public transport, based on http://www.ret.nl , Illustration by Author

Spatial segregation of the neighborhood

Picture6- Route S103, Google Maps Images

No spatial segregation

Picture7- Route S106, Google Maps Images
Spatial Segregation

As it is obvious from the maps, a special spatial segregation in terms of public connectivity or accessibility to public transport cannot be recognized because the neighborhoods of study and overall the Rotterdam South is quite well connected to the other side of the river and the center of Rotterdam by bus, tram, metro,.... So a segregation in a large scale does not exist but in a smaller scale some level of segregation could be seen for example for the neighborhood of Carnisse because it is in between a big-scale green area, ZuidPark, and the route S103 which is the regional route.
Spatial factors related to segregation

One of the spatial factors that intensifies the socio-economical segregation of the neighborhoods of study, is the high number of social housing that exist in this part of the city, as it mentioned before because this part of the city was planned and built for the harbour workers, the quality of the dwellings are low, so the price of the rent is also low which is the main reason of the attractiveness of these neighborhoods for the low-income people. The housing typology of an area has a direct relation with the socio-economical class of the inhabitants of that area (see diagram 9). Another fact about the housing of Rotterdam South neighborhoods is the low rate of private ownership and high rate of Rent corporation which is again a reflector of the concentration of low-income people and deprived classes in these neighborhoods.

![Social Housing is the dominant typology of the dwellings in the neighborhoods of study, Google Maps Images](image1)

![Few number of detached houses for middle-income people in the neighborhoods of study, Google Maps Images](image2)

![Map 15- Building Morphology in the neighborhoods of study, By Author](image3)

![Diagram 9- Relation between housing typology and social classes, By author](image4)
As Andersen (2004) argues, ‘Deprived neighbourhoods are mainly understood as just spatial concentrations of poor people - “pockets of poverty” ’ (Andersen, 2004, p.1). ‘As a consequence of this understanding area based initiatives to reduce deprivation of neighbourhoods often are regarded as just efforts to combat social exclusion at a local level’ (Andersen, 2004, p.1).

In addition to this Andersen (2002) mentioned that deprived neighborhoods could be recognized also as places contributed to the interaction between socio-economic status and spatial order, as he argues such urban areas should be seen as self-perpetuating negative social, economic and physical processes take place that makes a decline in the quality of living environment in some parts of the city (Andersen, 2004). ‘These places can be seen as magnetic poles that attract poverty and social problems, and repel people and economic resources in a way that have an influence on other parts of the urban space’ (Andersen, 2004, p.3).(see diagram number 3).

Overall there is an two-way relation between the deprivation of a neighborhood and it’s socio-economical or spatial segregation.

2.1.3 Self-perpetuating processes of deprivation and decay

According to Kirkegard (1985), deprived neighborhoods are places where a process of self-perpetuation happens as a negative output of physical, social and economical interactions (Andersen, 2004). Different writers have written about this issues, like Taylor (1998) who pointed to ‘the cycle of labelling and exclusion’, Gibb et al (1999) who mentioned the ‘indipendent neighborhood effects to do with cumulative decline’ and Hall (1997) who talked about the ‘downward spirals and dynamics in deprived neighborhoods (Andersen, 2004). All these statements refer to a process of deprivation and urban decay which is created by the interaction of inside and outside forces of deprived neighborhoods (Andersen, 2004) which has explained in the following.

2.1.3.1 Interior processes of neighborhood deprivation

The interior process of deprivation is about the negative social, economical and spatial changes that take place inside the deprived area which could be seen as a process which is affected by social norms and behaviors that impacts the physical and socio-economical status of a neighborhood (Andersen, 2004).

2.1.3.2 Exterior processes of neighborhood deprivation

The exterior process of deprivation points to the interaction between the deprived neighborhood and the city. As Andersen (2004) argues, the interior deprivation of a neighborhood makes a negative image of it which makes the decrease in the flow of capital, like private and public investment, and flow of people to these areas. As a result middle-income and high-income people won’t choose these areas for living because of the stigma and the low attractiveness of them. In this way these areas face with more decline and will attract only poor people (Andersen, 2004). In addition to this according to Van Kampen (1998), the other factor that could make a negative impression of deprived neighborhoods is the missing or the low number of public facilities like shops, cafes, cinemas,… in the deprived neighborhoods which could make these areas less attractive for the outsiders (Andersen, 2004).
Overall it could be concluded that the common notion that explains the deprivation of a neighborhood as a consequence of segregation is not complete (Andersen, 2004). It is more logical to see this phenomenon as a two-way interaction between segregation and deprivation, so the social and spatial segregation intensifies the deprivation and vice versa. The diagram below provides a better understanding of this process.

![Diagram 11- Process of neighborhood deprivation, Andersen, 2004](image)

After achieving a holistic understanding of deprivation and the process of it, it is necessary to explore the effects of deprivation on the residents of a neighborhood from different aspect; social, economical and even the effect of deprivation on the physical environment. The next part of literature review will help to understand the main negative and positive consequences of the spatial concentration of deprived groups in a neighborhood.

### 2.1.4 Neighborhood effects of concentration of deprived

In the following the literature will focus on the effects of concentrated poverty in the neighborhood level. Most of the research on poor neighborhoods deals with the size and nature of neighborhood effects and they are mainly focused on the negative effects of such concentration (Kleinhans, van der Land & Doff, 2010) The main concern about such effects is about the social networks and social capital related to the neighborhood that one is living in (Kleinhans, van der Land & Doff, 2010). The context of poor neighborhoods very likely affects the nature and strength of social interactions like residents attachments. “Concentrated poverty, crime, perceived disorder and social heterogeneity often hamper residents emotional bonds to their local environment” (Kleinhans, van der Land and Doff, 2010, p.384).

Lots of researchs have been done about this topic and most outcomes insist that a relation exist between the neighbourhood and individual outcomes (Manley, Ham, & Doherty, 2011). Wilson (1987, 1991) is generally regarding as the starting point of the neighborhood effects debate, he developed his notion of negative neighborhood effetcs within the context of the labour market and the problem of long-term unemloyment (Bridge, Butler & Lees, 2011, p.153). He suggested that concentration of individuals experiencing long-term unem-ployment in certain neighborhoods could lead to outcomes that include ““negative social dispositions, limited aspirations and casual work habits”(Wilson, 1991, p.642; Bridge, et al, 2011, p.154). Another example of such research is a study done by Overman (2002) who concluded that neighbourhood character-istics influenced the individual results of kids in schools.

In the following these neighborhood effects has been discussed both the negative ones and the positive ones, which will help to understand the problems and potentials in deprived neighborhoods.

**Concentration of deprived groups in a neighborhood intensifies lack of access to information, jobs and social interaction.**
2.1.4.1 Disadvantages of concentration of deprived groups

**Economic disadvantage**

Morris (1987) suggests that the spatial concentration of poverty in a neighborhood may have negative effects on the social relation of the residents which directly influences their chances for finding a job because of the limited access to the information resulted by poor social networks (cf. Hughes and Madden, 1991; Bolt et al., 1998). In addition to this, the concentration of low-income groups might also lead to fewer opportunities for informal economic activities. For example, in a mix class of income neighborhood, high-income households can generate demand for services that low-income individuals can supply, jobs like childcare, house cleaning, housekeeping, ..., but when there is a homogeneity, this applies to housekeeping, odd jobs, cleaning, and child care in particular (Bolt et al., 1998).

As Bolt et al. (1998) argue, ‘the critical issues here is that a high degree of concentration of low income people will not allow the contact between those who offer this kind of work and those who can perform it’. According to Gronovetter (1973), ‘the “weak ties”, so relevant in terms of offering labor market opportunities, are missing in these neighborhoods’ (Bolt et al., 1998, p. 86). This issue will be analyzed and more explained about the neighborhoods of study in the next chapter. Also, in the table below, a comparison between some of the economic indicators like unemployment, households in poverty, ... for the Rotterdam South is introduced.

<table>
<thead>
<tr>
<th>Subject</th>
<th>National</th>
<th>Rotterdam</th>
<th>Southbank</th>
<th>7QL</th>
</tr>
</thead>
<tbody>
<tr>
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<td>16,654,000</td>
<td>610,412</td>
<td>193,982</td>
<td>76,728</td>
</tr>
<tr>
<td>Average household income per year</td>
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<td>29,200</td>
<td>25,700</td>
<td>24,000</td>
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<tr>
<td>Unemployed</td>
<td>6.3</td>
<td>8.3</td>
<td>8.8</td>
<td>11.3</td>
</tr>
<tr>
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<td>19</td>
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<tr>
<td>Estimated tax value private owned houses</td>
<td>233</td>
<td>163.8</td>
<td>128.9</td>
<td>106.7</td>
</tr>
</tbody>
</table>

**Table 2:** Economical Indicators comparison of Rotterdam and Rotterdam South, EuroCities NLAO, 2012

**Norms and Values**

The agglomeration of socially deprived groups could intensify the isolation of this group because of the weak situation that they have in the society, for example dependency to the welfare state (Bolt et al., 1998).

According to Engbersen and Snel (1996), the deviant norms towards work is more common in the neighborhoods with high rate of unemployed people (Bolt et al., 1998). In addition, alternative “survival strategies”, like the informal and criminal activities are more common in these neighborhoods which is because of the lack of social cohesion which could be intensified by the morphological structure of the neighborhood as well (Bolt et al., 1998).

There are some evidence as confirmation of these hypothesis; Musterd (1996), for example, found that ‘the social participation of the people in neighborhoods with an over-representation of unemployed and low-educated people is lower than the social participation of people outside these areas or in a deprived neighborhood of a small Dutch city, Terpstra (1996) found that the willingness to accept a job was very small, and living on unemployment benefits was accepted as a normal way of life’ (Bolt et al., 1998, p. 86).
Amenities and the neighborhood

Concentration of poverty effects the quality and quantity of the public facilities specially commercial services in a neighborhood, because when a high degree of segregation in terms of income exists, the service structure in low income districts will feel the effects much more acutely than in the event of a low degree of segregation by income (Sarkissian, 1976; Messy and Denton, 1993). A concentration of poverty can have negative effects on the presence of non-commercial facilities as well. This happens specially when the residents of the area are not affordable enough to demand for public facilities and standing up for themselves (Bolt et al, 1998).

This is true for the four neighborhoods that I am studying on. According to the map number 16 which shows the degree of multi-functionality of these neighborhoods it is obvious that there is a considerable degree of mono functionality (the red blocks) in these neighborhoods specially in Bloemhof, Carnisse and Tarwewijk. If we make a comparison between these residential blocks and a residential block in other part of Rotterdam we can see the difference more explicit.

This feature could have consequences for the neighborhoods in social and economical terms; as mix-use neighborhoods provide a context for social interactions and a vital socio-economic environment, lack of mix-use will lead to a non-vital socio-economical environment. It will also prevent the flow of capital in these neighborhoods. overall low degree of multi-functionality could decrease the socio-economic vitality of the neighborhoods.
In addition to the commercial services, one of the other public facilities that could be affected by deprivation of a neighborhood and concentration of poverty is the public space. In the map below public-green spaces are explored in the neighborhoods of study. This is more about the quantity and spatial distribution of green spaces in each neighborhood.

As it is obvious from the map below, there is a big green space in the centre of Afrikaanderwijk which makes it a good spot for being a local centre; providing social interactions between the residents. The only weakness in relation to green space in this neighborhood is the lack of semi-public spaces, spaces for 3 or 4 blocks which is less public than this central green space. In contrary in Tarwewijk there are considerable number of small-scale green spaces which have a sufficient spatial distribution in the neighborhood, this feature provide a public space mainly for 3 or 4 blocks that the green space is surrounded by, a sufficient place for having social interactions with the neighbors or the childrens play ground. In Bloemhof the existing public-green spaces are linear alongside the canal, which hardly provide a context for social interactions. In addition to this the number of public-green spaces in this neighborhood are few.
After the site visit it becomes clear for me that some of the existing public-green spaces in these four neighborhoods are not working well because of the low quality of them; some of these spots are just open spaces and not public places. In other words they don’t have the features that a public space should have for being vital like various furniture’s for different kind of uses, variety of amenities, ... . Overall most of the public spaces are not gathering spots for the local people. Especially in Tarwewijk and Bloemhof this issue is worse. In addition to this most of these public spaces are surrounded only by dwellings and there are no facilities like cafes, retails, near them which is another reason that prevents the vitality of these public spaces. In general these neighborhoods are suffering from lack of vital public spaces. This issue will be addressed more in the following chapters.
Furthermore, poverty concentration neighborhoods typically have access to fewer private, non-profit, or public institutions and organizations that work to improve the quality of life and opportunities (National poverty centre paper, 2006). This concentration also affects the condition of the living environment mainly the dwellings; homeowners may have no money to invest on their dwelling and landlords may not take care of their properties. This could make a cycle of decay because fewer people will find it necessary to invest in the dwelling which makes more and more decline of the quality of houses and over all the living environment (Massy and Denton, 1993).

**Development of stereotypes**

Segregation and concentration of deprived could have another effect; As Wacquant (1996) suggests ‘Such areas become isolated territories viewed by both outsiders and insiders as social purgatories, urban hellholes where only the refuse of society would accept to dwell’ (Wacquant, 1996, p.125; Bolt et al, 1998, p.88 ). This attitude makes these neighborhoods non attractive areas for the middle or high income classes because of the relative low rate of safety and high rate of social problems in them. In this way they decline in their position in the housing market (Bolt et al, 1998).

**Social Isolation**

‘Many studies on poverty in neighborhoods and its (potential) negative effects focus on the question of ‘social isolation’” (wilson, 1996; van Eijk, 2010, p.89). According to Small (2007), ‘the question of social isolation in poor neighborhoods is, at heart, an issue of how people develop networks which is the main challenge of the social isolation theory related to deprivation’ (Small, 2007, p.181). Villa suggests the social capital in a neighborhood could be affected by concentration of poor people (Small, 2007).

In addition to this the social isolation thesis claims that the absence of resource-richer people in high-poverty neighborhoods makes it difficult for resource-poor people form relationships with resource-richer people and this affects their options to improve their societal and economic status (van Eijk, 2010, p.90). Wilson’s analysis thus indicates that the neighborhood is a crucial cause of network inequality (van Eijk, 2010, p.90).

As explained, the spatial concentration of deprived groups could have several negative neighbourhood effects. Besides these disadvantages it is crucial to find out if this concentration could have advantages or not. So the following literature is about the positive effects of concentration of poor people, mainly immigrants, in the Dutch deprived neighbourhoods.

### 2.1.4.2 Advantages of concentration of deprived groups

#### Social and cultural advantages

The existence of the homogeneous people who have the same features in terms of social class or ethnic could be seen as one of the positive aspects of spatial segregation and concentration. Social contacts in these areas can lead to the emergence and preservation of a culture that is totally different from the culture of the mainstream society (Bolt et al, 1998). The effort to maintain a minority culture could also spread in the commercial environment like creating of specific retails, clubs and religious institutions (Bolt et al, 1998). This social difference could provide an economical basis for some entrepreneurs which is explained in the next part.

#### Economic advantages

Concentration of ethnic groups which is one of the features of the deprived neighborhoods in the Netherlands, could provide a basis for special kind of businesses; small ethnic enterprises which are related to the demand of immigrants. This is an important opportunity for these kind of neighborhoods not only for the economical improvement of them but also for enhancing the social networks among the inhabitants of these neighborhoods (Bolt et al, 1998).
In the Netherlands the relationship between minority ethnic enterprises and urban renewal shows a number of characteristics that are important to Dutch cities. Minority ethnic enterprises were mainly set up in urban renewal areas. This concentration was the result of developments causing immigrant groups to be assigned accommodation in those areas. Some areas developed an ethnic infrastructure consisting of a network of businesses, retailers, services and religious and welfare services. Unemployment stands out as one of the main reasons for starting a business. From 1986 to 1992 the number of minority ethnic entrepreneurs in the Netherlands more than doubled, increasing from 9400 to 19000. In recent years immigrant entrepreneurs have been more often active in businesses such as the provision of commercial services. Another important characteristic of immigrant business sector is that it involves business or shops that rely on cheap and loyal labour supplied by family and relatives (Stouten, 2010, p.89).

This feature could be considered as one of the potentials in economical aspect in the deprived multi-cultural neighborhoods of Rotterdam South. As it has shown in the charts, there is a considerable number of ethnic groups living in these four neighborhoods specially in Bloemhof and Tarwewijk. This characteristics could provide a basis for ethnic enterprises and local businesses which is one of the main focuses of this graduation thesis.
2.1.5 Conclusion

According to what mentioned in this part, the spatial concentration of deprived people could have both negative and positive effects which is also true for the Rotterdam South neighbourhoods. These negative and positive effects will be considered in the next chapters for proposing a strategy which is going to use the positive effects as potentials and will try to tackle the negative effects. But before doing this, it is necessary to have an overview of the strategies which have been implemented to these areas in the recent years.

In the recent years a lot of effort has been done by the government and the municipality of Rotterdam for solving the problems of deprived neighborhoods which is more focused on the negative effects of this concentration of poverty. Different strategies and policies have been taken in this relation especially after the end of the 1960s. This is what the next chapter is dedicated to which will provide an overview of the past and current trends and strategies for transforming these neighborhoods.
2.2 Urban transformation- Deprived neighborhoods

This chapter will explain different approaches for the urban transformation of problematic deprived neighborhoods in the Netherlands by special focus on Rotterdam. Different strategies for urban transformation will be explored from 1970s till the recent years and in the end the approach that is going to be used in this thesis will be clarified in relation and in comparison with the other approaches.
Urban regeneration of deprived neighborhoods in Netherlands-Rotterdam

Urban renewal and restructuring in low-income neighborhoods which most of the time includes a high population of ethnic minority has always been a great concern for the government and municipalities in the Netherlands and the other western European countries (Rendon, 2012). Specially since the 1970s when a number of urban renewal policies have tried to respond to the effects of socio-economic and political shifts which not only increased the number of low-income or unemployed people but also the degree of multiculturality of the society (Rendon, 2012).

In this part a brief review of regeneration policies for problematic neighborhoods mainly in Rotterdam has been done which explores different strategies from around 1970s till the last decade.

2.2.1 Urban Renewal before 1974- Housing improvement through massive demolition

In the Netherlands the policies of urban renewal dates back to the end of 1960s, when focus on Housing was the main concern of these policies (Stouten, 2010). This was also true for Rotterdam low-income neighborhoods where demolitions for new constructions of dwellings and roads, which was intended to improve the physical and economical situation, were the main strategy for the renewal. The weakness of this strategy was that it did not consider the needs and interests of the weak groups of the society in residential neighborhoods, so these actions provoked tenants protest, claiming different housing rehabilitation and development approaches in a context of strong political agitation in Europe and the rest of the world (Rendon, 2011).

2.2.2 Urban Renewal from 1974 to 1993- Building for the neighborhood vs. Building for the market

‘In the 1975 policy document on urban renewal, the new mayor and city councillors laid down the basic principles of urban renewal .Special attention was paid to the lowest paid and to individuals who could be considered volunerale members of society’ (Stouten, 2010, p.111).

This was the consequence of the oppositions of residents, from the mid 1970s autocratic mainstream programmes which were mainly based on demolition and reconstruction replaced by new policies based on the socialisation and democratisation of housing and neighborhoods (Rendon,2012).

At this time “Building for the neighborhood” was the slogan of the urban renewal policy (Stouten, 2010). ‘It was oriented towards building and renewing affordable housing through shifting private rental to social housing. The policy was mainly for inner city areas and low-income households. It addressed active participation of tenants without changing the social composition of the neighborhood’ (Hulsbergen and Stouten, 2001; Rendon, 2011, p.35).According to Stouten (1995) ‘The approach was based on a coalition between residents, local authorities, organisations and housing associations, with a high degree of government intervention’ (Stouten, 1995; Rendon, 2011, p.35).
According to the newly elected local government, financial resources had to be spent in the other urban areas and focus on other issues. The state’s economy forced local authorities to find new ways for continuing urban regeneration which was about working with private investors on the projects mainly focused on building for new categories of residents.

Opposition to cooperating with the market in the provision of housing, some of which came from members of the labour party, was gradually disappearing, even among social democrats which has a great influence on the urban renewal projects (Stouten, 2010, p.123).

During the 1980s because of the political and economical changes a drastic shift took place in the urban renewal policies in Rotterdam which is explained above:

- According to the newly elected local government, financial resources had to be spent in the other urban areas and focus on other issues.
- The state’s economy forced local authorities to find new ways for continuing urban regeneration which was about working with private investors on the projects mainly focused on building for new categories of residents.
- Opposition to cooperating with the market in the provision of housing, some of which came from members of the labour party, was gradually disappearing, even among social democrats which has a great influence on the urban renewal programmes (Stouten, 2010, p.123).

As Stouten (2010) mentioned at that time the principles for urban renewal were based on three main pillars:

- **Building for the neighborhood**, which was mainly about considering the needs and requirements of the residents living in the areas under renewal.

- **Decentralization and democratization**, which was about changing the structure of decision making and the municipality was not the only decision maker anymore, but people were also involved and had the opportunity to talk about their needs in their residential neighborhood.

- **Socialisation of the housing provision**, According to the city council, landlord were the main responsible of housing decay in problematic neighborhoods because they didn’t invest for maintaining the houses, so the new idea tried to make the housing associations involve in the maintenance of housing and bring these properties to the social sector (Stouten, 2010).

The main goal of this strategy was to facilitate the incorporation of the residents in the process of decision making for their neighborhoods. The strategy leads to a considerable change in the urban planning process (Stouten, 2010). This policy lasted about two decades, but in the beginning of 1990, urban renewal programmes changed their focus from building for the neighborhood to building for the city (Stouten, 2010; Rendon, 2012).

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- According to the newly elected local government, financial resources had to be spent in the other urban areas and focus on other issues.
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- Opposition to cooperating with the market in the provision of housing, some of which came from members of the labour party, was gradually disappearing, even among social democrats which has a great influence on the urban renewal projects (Stouten, 2010, p.123).

**Around 1980 Building for the neighborhood was the main slogan for the Urban Renewal which active participation of tenants was a main part of it**
At the same time socio-economic inequality increased, with more employment for the higher educated and less work for the low-educated people which leads to the increase of informal economic activities (Stouten, 2010). At this time also the policy on housing constraints changed, the house-buildings programme which were led by the central government before, replaced by market-oriented leadership and housing associations began to achieve a considerable degree of independence (Stouten, 2010).

In the 1990s both national and local governments coincided with the opinion that ‘in a number of urban districts there was too great concentration of ethnic minorities, low-income groups and unemployed and that a re-differentiation of the housing stock was necessary’ (Priemus, 2004; Rendon, 2011, p.37). By the end of the 1990s the outcome of market oriented strategies of urbanisation materialised in spatial and social segregation (Rendon, 2012, p.50). ‘Neighborhood decline was manifested heavily in low-income and minority areas’ (Rendon, 2012, p.50). ‘At this time in an attempt to develop a complete consensus between all the parties involved, participation models were developed, which were based on co-operation between public and private sector. Differentiation of the residential environment became one objective of a policy aimed at achieving revitalisation’ (Stouten, 2010, p.128). ‘Both social and physical components were ascribed to the residential environment’ (Mayor and Alderman of Rotterdam, 1988; Stouten, 2010, p.128).

The city tried to make differentiation in the housing typology to attract middle-income and high-income people to Rotterdam for achieving a socially undivided city. At this time restrictions for building in urban renewal areas led to the assignment of locations for commercial development and landlords (Stouten, 2010).

From that time till now future plans of Rotterdam are aiming for providing an attractive living and working environment for the ‘creative class’ to attract new business and middle and high-income residents (Gemeente Rotterdam, 2007; Rendon, 2012). The current policies related to this trend is explained in the next paragraphs.

2.2.3 Recent Urban Renewal policy in low-income neighborhoods and approaches of implementation addressing citizen participation

‘According to the recent concerns in deprived neighborhoods, the urban policies in the Netherlands for these areas are based on these key features:

- A coordination and integration of economic, social and urban policies
- An increase of area-based approaches addressing urban renewal
- A shift from government to governance
- Realisation and encouragement of residents involvement in urban renewal and regeneration processes at the local level’ (Andersen & Kempen, 2003; Lupton & Turok, 2004; Rendon, 2011, p.38).

Each of these underlying policy tendencies implies local and community action in different levels of planning, decision making and implementation, for making urban change (Rendon, 2011, p.38). In the following the way these policies have been taken into practice is explained.

Integrated and area-based approaches

In the last two decades the urban policies in deprived neighborhoods has been emphasized on the interventions both on the spatial aspect and the socio-economic aspects. These approaches most of the time intend to change the nature of the place and in the process to involve the resident community and other interest with a stake in its future (Lupton & Turok, 2004; Rendon, 2011). In addition to this according to the problems and potentials of the area, plans of social, economical and spatial regeneration will be included in the responsibilities of the government (Rendon, 2011).

Governance and decision making structure

In the deprived neighborhoods in the Netherlands and specifically Rotterdam local urban politics are increasingly organised in partnership with an extended range of non-governmental actors holding relevant resources of their own.
Such a trend reflects a shift from government to governance, where the involvement of the state becomes less hierarchial and more facilitating and moderating’ (Rendon, 2011, p.43).

But there are few evidences that these policies have been successful in the practice, as Harvey (2005) argues even when these forms of governance promise the inclusion and empowerment of the deprived groups in the decision making, they may lead in the direction of greater autocratic governance and limited participation of these groups (Harvey, 2005; Rendon, 2011).

2.2.4 Conclusion

It could be concluded that there have been lots of changes in strategies over time for tackling problematic deprived neighborhoods. As explained in the text, in Rotterdam deprived neighborhoods the main focus has almost always been on housing, in different ways like reconstruction of the housing, integrating different kind of housing typology, ... (check table number3 for more details). But for solving the problems in these kind of neighborhoods a multi-layer approach is needed because the problem is rooted from spatial, social and economical aspect, so these layers should be recognized all together, a trend which has been reaching in the recent years as you can see in the table number3. In the next page a comparison with these strategies and the strategy that I am going to follow has been shown in a multi-layer kind of approach. The main strategy that is going to be focused on as mentioned in the research question explanation is the empowerment of these deprived neighborhoods.

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<th>Time Period</th>
<th>Urban intervention</th>
<th>Key features</th>
<th>Issue of Focus</th>
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<td>End of 1960</td>
<td>Urban Renewal</td>
<td>- Housing re-construction and demolition</td>
<td>Spatial</td>
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<tr>
<td>1974-1993</td>
<td>Urban Renewal</td>
<td>- Socialisation and democratisation</td>
<td>Socio-Spatial</td>
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<td>1993- till now</td>
<td>Urban Regeneration</td>
<td>- Change of government to governance</td>
<td>Socio-Spatial-Economical</td>
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Table3- Urban Intervention in deprived neighborhoods of Rotterdam through the history, By Author, Based on the literature of this chapter

In the next chapter the precise explanation about empowerment as an urban transformation strategy is explained.
My approach for transformation of Rotterdam South deprived neighborhoods in comparison with other Urban Renewal approaches

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2.3 Neighborhood Empowerment

This chapter will provide a holistic understanding of different attitudes about Empowerment; different types and levels of empowerment will be explored briefly and then the main focus will be on community empowerment on a spatial basis which is a neighborhood in the case of this thesis. Different strategies for neighborhood empowerment will be explained and as a result the strategy which is going to be the main pillar of this thesis will be clarified. In the second part of this chapter, the literature review will focus on economical empowerment of deprived neighborhoods. In this part problems and potentials of the economy of deprived neighborhoods will be studied to gain a better understanding of the current socio-economical situation of these neighborhoods. The result of this part will be a proposal design strategy which will help to go further in the next chapters which are more related to the design.
2.3.1 Definition of Empowerment

‘Empowerment is related to the word power. In English, the concept leans on its origin meaning of investment with legal power, permission to act for some specific goal or purpose’ (Rappaport, 1987; Sadan, 1997, p.73). Empowerment could be explained as giving the people the power to have control over their lives and this should be recognized both as an outcome and a process (Staples, 1990; Sadan, 1997). In other words empowerment is a process that obtain the capacity for acting on issues in individual life, a community or the whole society (Czuba, 1999; Kasmel, 2002).

Different attitudes exist about the empowerment and the exact definition of it from the point of view of social scientists, urban planners and the other fields of study (Sadan, 1997). In the following, an overview of these different attitudes has been explained briefly which is about three of the most fundamental writers in relation to this topic.

As Peter Berger and Richard Neuhaus (1997) argued, empowerment is a strategy for promoting the welfare services by the help of social institutions (Sadan, 1997). On the other hand, Julian Rappaport (1981) developed the concept theoretically and presented it as ‘a world-view that includes a social policy and an approach to the solution of social problems stemming from powerlessness’ (Sadan, 1997, p.73).

According to Friedman (1992), ‘the notion of empowerment consists of eight bases of social power, which enable poorer households to get out of the circle of absolute poverty’, which could be described as follows:

1- **Defensible life space** refers to the territorial base of the HHE (Household Economy) in which the households members do their daily non-market oriented activities; this includes personal space and wider neighborhood space where socialization take place.

2- Surplus time, refer to the extra time available outside of those needed for subsistence activities. It includes time needed for to travel to work, obtaining basic consumption item, rest, doing domestic activities and so forth.

3- **Knowledge and skills**, refer to training or education that could be use to improve future long-term economic prospect.

4- Appropriate information refers to any kind of information that could be useful for gaining work opportunity, obtaining public services, ...

5- Social organization, refers to any kind of organization that the household belong to that could serve as a source of information and support, such as religious organization, micro bank, support group and so forth.

6- **Social Network**, includes network that enables household to survive ..

7- **Instruments of work and production**, include tools and space that is needed for household production.

8- Financial resources, includes household direct income and also any form of formal or informal credit arrangments’ (Friedman, 1992 ; Tunas, 2008, p.46).

Friedman’s explanation of empowerment could be summarized in the world bank’s definition of empowerment which is one of the most precise and more
2.3.3 Community Empowerment

For understanding community Empowerment it is necessary to define the “Community” first. Napier (2002) defined ‘community as a term associated with existing formal and informal community networks and local community organizations’ (Napier, 2002; Kasmel, 2002, p.7). Nutbeam (1986) argued that community is ‘a specific group of people living in a region, who are arranged in a social structure and exhibit some awareness of their identity as a group’ (Kasmel, 2002, p.7). According to Laverack (2003) ‘the concept of “community” includes several key characteristics:

1) a spatial dimension, that is, a place or locale,
2) interests, issues or identities that involve people who otherwise make up heterogeneous and disparate groups,
3) social interactions that are dynamic and bind people into relationships with one another,
4) identification of shared needs and concerns that can be achieved through a process of collective action’ (Kasmel, 2002, p.7).

This last definition is more related to this thesis because here the community is going to refer to the people who live in the same spatial context; A neighborhood and have more or less the same socio-economic features which according to the former explanations is being low-income and deprived. So the following literature will focus on the empowerment considering both the spatial and the social dimension according to the definition above.

2.3.2 Levels of Empowerment

Empowerment could be categorized in three different levels: Individual empowerment which focuses on what happens in the personal level in the individuals life, community empowerment which emphasize the collective processes and the social change and empowerment as a professional practice which sees empowerment as a means of professional intervention for the solution of social problems (Sadan, 1997).

The community empowerment is more relevant to the issues that this thesis is facing with, because this thesis is going to tackle with the socio-economic deprivation of a special group of people (a community) and trying to find solutions for decreasing this deprivation.

So the following literature will provide a clear understanding of community empowerment by presenting the definition of it and different approaches (strategies) for achieving this kind of empowerment.

Empowerment is a tool for communities to resolve inequalities and to make an even distribution of resources in their communities (Rappaport, 1981).

2.3.3.1 Community Empowerment on a Spatial Basis; A Neighborhood

The discussion of community empowerment on a geographical (spatial) basis is mostly recognized as neighborhood empowerment which has different perceptions in different professional disciplines, e.g., community psychology, community work, urban studies and planning (Sadan, 1997). One of the dominant attitudes about the neighborhood empowerment is about providing a proper context for the residents to be involved in the neighborhood affairs which will become practical when the power given to the residents for participating in the process of decision making. This will lead to more control on the neighborhood affairs by the inhabitants (Biegel, 1984, Sadan, 1997).
So According to Sadan (1997) ‘the test of community empowerment is the active participation of the people themselves in the process of decision making that affect the community, starting from the stage of formulating the goals, through the stage of evaluating the outcomes of the effort’ (Sadan, 1997, p.90). This perception of neighborhood empowerment is the one that has been considered as one of the policies for combat the problems of deprived neighborhoods in the Netherlands from 1974 to 1993 (refer to urban transformation chapter).

which was trying to help the people increase their voice and provides a context for the residents involvement in solving the problems of their living area.

But another way of looking at empowerment exists which is more relevant to the goal of this thesis which is explained in the following. John Friedman (1992) proposed another attitude about community empowerment, he claims that ‘community empowerment is the creation of access to social and economic resources. Poverty, then, results from lack of access to essential resources, not only economic but also political and social resources ’ (Sadan, 1997, p.7). This way of considering neighborhood empowerment is the one that is going to be emphasized on in this thesis.

The neighborhood empowerment strategy related to Friedman’s definition is a development which is trying to increase the physical and economical situation of a neighborhood. This strategy could be considered in different ways like reconstruction of the housing or creating jobs and enterprise opportunities for the residents of the neighborhood (Tunas, 2008). It could be also considered as community-based improvement which could be done by job training, parenting skills, housing counseling, ...; the things which are known as “human capital”. (Dreier, 1996; Tunas, 2008).
Overall we can recognize two main strategies about neighborhood empowerment (see diagram number 14); one is more focused on bringing the community into the process of decision making and making them involve in the affairs of their neighborhood and the other is increasing their power by providing better socio-economical situations for them. In other words its about socio-economical empowerment of the neighborhood.

This thesis will mainly focus on the second strategy for making a change in the socio-economical deprivation of Rotterdam South neighborhoods according to the problem field an the main research question of this thesis. For understanding the best strategy for socio-economical empowerment of the deprived groups of Rotterdam South, it is necessary to gain a holistic understanding of the problems and potentials in the socio-economic aspect in these neighborhoods which some of them addressed in the previous chapters (about the negative and positive effects of the concentration of deprived). So the next chapter is dedicated to this issue which will guide the thesis towards the first step of the design strategy.

Diagram 14 - Different strategies for Neighborhood Empowerment, By Author
2.3.4 Economy of deprived neighborhoods

Achieving a strategy for the economical empowerment of the neighborhoods of study needs a study about the characteristics of the economy in these neighborhoods. For achieving a holistic understanding of the economy of deprived neighborhoods, it is necessary to understand in one hand the kind of economies that exist in these neighborhoods which could be developed and supported, on the other hand the type of economies that are missing or there is a shortage of them. This needs to be done by considering the demands and features of deprived neighborhoods. In other words for achieving the best strategy for economic empowerment of these neighborhoods we have to understand the economical problems and potentials in these neighborhoods which is explained in the following.

2.3.4.1 Problems

The Economy of deprived neighborhoods is different from the economy of other neighborhoods mainly because of the high level of unemployment, low rate of economic activity and low level of skills and education (North & Syrett, 2006). In the previous pages, the demographs shows how low are all these indicators for Rotterdam South neighborhoods (refer to page 23).

In addition to this, the number of small businesses and enterpreneurships are lower in comparison to the other neighborhoods while the informal economic activity becomes more important for these areas (North & Syrett, 2006).

The private investment is also low in deprived neighborhoods because in one hand there is a few demand for that and on the other hand the appearance and the social and the physical environment which is one of the important factors for attracting the private sector is not proper in these areas. Overall in these neighborhoods the financial and physical capital is lower and investment, specially private investment, rarely happens (North & Syrett, 2006).

Furthermore the quality of public sector services in deprived neighborhoods is quite low because of the characteristics of the population living there. The quality of public sector provisions is important economically because it is about attractiveness of the physical environment to residents and businesses. it is also about the ability of residents to gain and retain employment , the effectiveness of public services directly related to employment and economic development (North & Syrett, 2006).

As mentioned above the investment of private sector is also low and the disappearance of private sector services from deprived neighborhoods happens in a reinforcing cycle, involving the decline of quality of the local environment, declining the levels of demand and active area discrimination (North & Syrett, 2006, p.28).

The diagram above is summarized the main economical problems in deprived neighborhoods which is in one hand affected by the deprived people living in these neighborhoods, on the other hand by the low investment in these places. In the following another aspect of the economic feature of deprived neighborhoods, which most of the time is considered as a problem but could be an opportunity from the view of author, is explained.
Informal Economy

Another aspect in the analysis of the deprived neighborhoods economy which is invisible but needs to be considered, is the Informal Economy. The studies from the Department for Communities and local Government of London (2006) which is about the economy of deprived neighborhoods, argues that ‘while most of the policy attention is focused on formal economic activity, it is also necessary to understand the role of informal economic activity’ (North et al, 2006, p.14). For understanding this, it is necessary to frist define what informal economy means exactly. According to Kloosterman & Rath (2001) ‘informal activities, is about mean ‘activities aimed at producing a positive effect on income , for which the terms of legislation and regulations (planning requirements, social security legislation, collective labour agreements,..) applicable to the activities are not being met’ (Kloosterman & Rath, 2001, p.27).

According to the Department of communities and local government of London (2006) three categories of informal economy could be distinguished: informal paid work, informal unpaid work and illegal activities. In other words as Tunas (2008, p.31) argues the different informal economies are:

1- Household Economy; activities that produce goods or services for the member of the household without financial payment.

2-The Communal Economy; activities that produce goods or services for member of community or society as a whole.

3- The Underground Economy; activities that produce goods or services for financial benefit that evade taxes or other regulation.

Informal Economy as a potential...

Most of the informal economic activities are not acceptable because it is illegal and against the rules of the economic activity. The only type of informal economic activity that could be acceptable is the community economy only if it is based on exchanging goods or services. This could be considered as an opportunity for the people living in deprived neighborhoods, because it could help the people living in these areas to use there abilities and skills (in the production of sth or doing sth) in one hand and to benefit from the others abilities as well. In addition to this, this type of economic activity could be a solution for increasing the social interaction in the deprived neighborhoods of Rotterdam, because as mentioned before weakness in the social interactions and social ties is one of the considerable problems in these neighborhoods. This type of informal economic activity needs appropriating space for production and exchange. For example facilitating some public or semi-public spaces as a place for exchanging goods and some buildings as places for exchanging services. The role of social network in important in this relation to help the people facilitate their exchange interactions. Spatio-functional interventions could help to create or increase this network. For example one of the recent proposals which has been done in this relation in Tarwewijk neighborhood is a social machine which is explained in the following.

Facilitating a kind of Informal Economy which is based on exchange of goods or services
This social machine is designed by Thomas Lomme in the Economat project. It visualizes and maps micro-economical activities within a local community. A re-converted photo booth installation invites all inhabitants to capture, describe and locate their personal ‘demands’ or ‘supplies’ in a playful manner. All these messages can then be directly published on a wall or scanned and uploaded on a simple website. The Economat has been envisioned to complement and enrich existing local venues, such as library reading rooms, supermarket coffee corners or bakery diners, with a social function (www.en.nai.nl/platform). In this way people can know what kind of service or good is offered by their local community and they can exchange what they have by themselves with the others. In this way the people living in a neighborhood will not only benefit from the others services but also the social relations will improve which is one of the main goals of the socio-economic empowerment of the deprived groups so it could be a great potential for these areas.

In the following other potentials for improving the socio-economical situation of the deprived neighborhoods of Rotterdam South is explained which is driven from the features of these neighborhoods.
2.3.4.2 Local Enterprises as a potential...

According to the Local Government of London, deprived neighbourhoods are generally characterised by low rates of business start-up and survival, low levels of self-employment and high rates of unemployment. Attracting inward investment can help to increase employment options for residents, but in times and places where the flow of investment is limited, stimulating business starts and supporting small business growth is a sufficient way to promote the economical situation of the people. This requires more people to understand enterprise and the self-employment option and be supported in setting up businesses.

By considering the previous analysis and literature in this thesis, two specific kind of enterprises is considered as potentials for the socio-economic empowerment of deprived groups in the neighborhoods of study: one is the ethnic enterprises because of the high rate of multiculturality of these neighborhoods (which could provide a proper basis for the demand of ethnic enterprises) and the other is the social enterprise.

The main reason for focusing on social enterprises is the effect that this kind of enterprise could have both on social and economical promotions. It will be explained later how this type of enterprise is aiming for the social and economical empowerment of deprived people not only the individuals but also the community all together and this is what Rotterdam South neighborhoods need for tackling some of the main socio-economic problems of it.

In the following these two kind of enterprises, their definitions and impacts are explained:

2.3.4.2.1 Ethnic Enterprise

As it explained in the former chapters (neighborhood effects of concentration of poverty, page 35), one of the advantages of the concentration of low-income in the case of Dutch deprived neighborhoods is that most of them have non-dutch background which increases the opportunity for special kind of local businesses like ethnic enterprises because of the demand that exists in these kind of neighborhoods caused by the concentration of a special ethnic minority. This could provide an extra opportunity for these deprived neighborhoods for improving the local enterprises. In the following this will be explored in a broader context to find out how this feature could be a potential for socio-economical empowerment of Rotterdam South neighborhoods.

According to Rath & Kloosterman (1997), the percentage of small entrepreneurs is growing in the advanced economies and the immigrant entrepreneurs have a significant role in this rise. Ethnic enterprises is a great opportunity for the immigrants to start their own business and the access to it is more easy for them than the formal labour market (Kloosterman & Van Der Leun, 2010). The spatial concentration of minority ethnic groups has always been an advantage for the immigrant businesses. For example immigrant districts in the 19th century in Paris as well as some ethnic minority neighborhoods in this century in the United States provided a good opportunity for special kind of businesses (Kloosterman & Van Der Leun, 2010). This spatial concentration will provide supply and demand simultaneously. Furthermore coffee houses, local shops and other services run by immigrants may provide the taste and smell of their country of origin, a place where ethnic groups could broaden. These places could become the hot spots of information which is crucial for finding a job, a house or a partner (Kloosterman & Van Der Leun, 2010).

As an example the China Town neighborhood in Den Haag could be recognized which has a lot of Chinese related enterprises in part of the city centre because of the concentration of Chinese people in the streets surrounding.
‘Such social networks offer ways of obtaining (starting) capital outside the usual channels and are a chip and accessible source of information in finding both business properties and seeking staff. Social networks are also an important framework for relationships built on trust, which are the basis of any successful informal economic activities’ (Kloosterman & Van Der Leun, 2010, p.665).

In addition to this, the physical proximity which is a result of spatial concentration of immigrants will lead to supply advantages. It could be beneficial for close-knit social networks which may in turn help to keep business transaction costs down (Potes & Sensenbrenner, 1993; Kloosterman & Van Der Leun, 2010).

All of these factors could make a neighborhood with a high share of immigrants an attractive business setting for ethnic enterprises. Most of these enterprises start from home and the private realms and then spread in a more public realm if a basis exists for that, both from the social and spatial aspect.

The rise of ethnic businesses could provide an opportunity for immigrant employment, specially by considering the fact that ethnic neighborhoods has a high rate of unemployment and welfare dependency also low rate of education and skills, so these businesses will help to tackle these problems. Overall immigrant enterprises creates a win-win situation for the neighborhoods concerned by strengthening the economic base and by creating employment for the people who live there (Kloosterman & Van Der Leun, 2010). But launching local enterprises are not as easy as it seems, because the deprivation of a neighborhood provides serious tackles for it. This is the issue which is addressed in the following.

Focusing on ethnic enterprises is one of the most recent policies for tackling the problems of deprived neighborhoods in advanced European countries especially the UK. Although there is a considerable insist on “enterprising the communities” as a strategy for the economical empowerment in deprived neighborhoods, there is still a lot of things unknown about the real impact of these policies in practice (Lyon, Sepulveda & Syrett, 2007).

Considering this confusion, Lyon et al (2007) did a survey for identifying the impacts of ethnic enterprises in deprived neighborhoods. This survey is about the effect of these enterprises on the owner managers, the employees and the local community.

**Impacts on Owner-managers**

The research found that the major impact of ethnic enterprises is on the owners themselves in terms of livelihood and building skills. 88% of the entrepreneurs interviewed stated that their income level had improved ‘substantially’ as a result of becoming entrepreneur. These income streams were specially important for women entrepreneurs with childcare responsibilities as they had very few other sources of income. 52.5% responded that their skills had increased significantly. The only group that did not recognise any improvement in their skills were professional qualifications that were not recognized within the UK, who felt degraded by their unwanted move to self-employment (Lyon et al, 2007, p.367).
Impacts on the local community

Local communities living in the local areas benefited from the ‘specialised’ and/or ‘cheap’ supply of products and services offered by ethnic businesses. These included specialised services such as translation to/from ethnic minority languages and legal services for businesses and individuals. As one female entrepreneur explained:

‘I wanted to do something that the Somali community needed and now I am the only one in my community providing a one-stop wedding shop service. Most of my customers are Muslim women and they travel far when it comes to do their hair because they don’t want their hair to be seen by men. Here they have privacy and whatever they need I’ll do it for them’ (Lyon et al, 2007, p.368).

Despite of all these positive effects of this kind of enterprise, there are some barriers for the growth of entrepreneurship in deprived areas which is addressed in the following.

Barriers of Local (Ethnic) Enterprises in Deprived neighborhoods

In the recent years there has been lots of research about the barriers for launching local entrepreneurial in low-income neighborhoods. The recent researchs shows that there are different factors acting as a barrier for local economical activities in deprived neighborhoods (williams, 2011). As Williams (2011) suggested these factors could be explored in two different categories: one is the direct factors like the lack of self confidence, lack of financial supports and lack of affordable workspaces while the indirect ones are more related to the negative image of deprived neighborhoods and the fear of crime in these places. In addition to this the people who want to begin with a local enterprise in deprived neighborhoods are faced by difficulties in the initial investment which is because of different reasons like lack of collateral for bank loan, lack of role models, the few chances to access sources of funding from friends or families because they are also expected to be low-income,... (Williams ,2011).

In the following different factors that are considered as constraints to local enterprise growth is explained more precise.

Finance and investment

According to the research done by Lyon et al (2007) in some of the deprived neighborhoods of UK, finding the initial capital for starting-up a local business was the biggest barrier according to the interviews with the immigrants who wanted to launch their own business. Dependence on personal saving or borrowing money from friends or family were mentioned as the main resource for starting a business in deprived areas (Lyon et al, 2007).

‘Access to personal saving source of start-up capital appeared to be gendered, As a Sudanese female entrepreneur explained, ‘men are more successful in business because they can work and save money, while women often have to take care of the family’ (Lyon et al, 2007, p.369).

Marketing and Business Development

One of the other barriers for starting an ethnic enterprise is the weak knowledge of the people living in deprived areas about the market needs and sufficient strategies which lead to a financial sustainable business. This knowledge is limited because most of the immigrants have weak socio-economical ties
according to what mentioned in the previous chapter (about the negative neighborhood effects, refer to page number?) (Lyon et al, 2007).

**Information and advice**

Lack of information about the procedure of starting an enterprise, regulations and information about taxes is one of the other barriers for starting up local enterprises. Most of the people living in deprived areas don't know about the existence of business support or funds related to small scale enterprises so most of them rely on families or friend support (Lyon et al, 2007).

Other factors that mentioned in the last page like lack of self confidence, childcare, lack of stability in the neighborhood, ... are the other factors that are considered as the barriers of launching a local enterprise (Lyon et al, 2007). The chart below shows the degree of effect of each factor as a barrier from the point of view of 40 people who wanted to start-up their own business in deprived neighborhoods of London.

![Diagram17- Main constraints faced by deprived immigrants when starting up a local business, Lyon et al, 2007](chart)

**Conclusion**

All the barriers that mentioned can not be solved by direct spatial interventions of course and needs interventions in bigger scales like changing policies. The main problem for starting a local (ethnic enterprise) could be recognized in the financial aspect and the information (about market needs and process of starting up a local business. The first one needs interventions of the government by implementing some encouraging policies for the deprived people who want to start up a business while the other barrier could be solved by functional interventions like creating centres of information in the neighborhoods which give information and services for helping the ones who are trying to start their business. These centres could also affect the social network of these people which could be helpful for starting a business.
2.3.4.2.2 Social Enterprises

In the recent years urban regeneration is exploring the possibilities towards a more social-just and economically sustainable ways of neighborhoods regeneration. One of the concepts that attracted a lot of attention is the idea of ‘social enterprise’ which could affect the local economy and the social aspect of the deprived neighbourhoods simultaneously (Carpenter, 2013).

Different definitions exist about this term and as OECD noted in 1999, ‘there is no universal, commonly-accepted definition of social enterprise’ (OECD, 1999, P.9; Carpenter, 2013, p.140). In the following two of the most common definitions of social enterprise is presented:

The recent publication of OECD defined the social enterprise as:

Any activity that has an entrepreneurial base and the main goal of it is not achieving profit, but it is working for the public interest and the aim of it is promoting the socio-economic status of a community. Social enterprise could be considered as providing services for the people who don’t have control over their economic life which could be done in different ways like training, providing production tools and spaces, ... OECD, 2010; Carpenter, 2013).

The office for the civil society in UK defines social enterprise as:

A business with primarily social objectives whose surplus are primarily reinvested for that purpose in the business or in the community, rather than being driven by the need to maximize profit for shareholders and owners(Office of the third sector, 2006, p.10; Carpenter, 2013, p.141).

The European research network defines some social and economical criteria’s for the social enterprises which is explained in the next page:

**Economic**

1. A continuous activity producing goods and/or selling services
2. A high degree of autonomy
3. A significant level of economic risk
4. A minimum number of paid workers

**Social**

1. A decision-making power not based on capital ownership
2. An explicit aim to benefit the community
3. An initiative launched by a group of citizens
4. A participatory nature, which involves the people affected by the activity (Defourny, 2001)

As mentioned before, social enterprise could play a significant role in urban regeneration and the effect of it could be recognized mainly in three aspects:

1. **Economic Development**, by providing opportunities for local businesses and increase the possibilities for economical performances of a community which could be done directly or indirectly by training, work experience, ...

2. **Social Cohesion**, by providing a community-based economy which leads to increase in local participation and social interactions of the inhabitants in a (deprived) neighborhood. In other words social enterprise will have positive effects on the social capital.

3. **Public service Delivery**, social enterprise could be the compensation of the shortage of public and private services in deprived neighborhoods and it could make the improvement of the quality and efficiency of the service delivery in these kind of neighborhoods (Carpenter, 2013).

According to what mentioned about the goal and impacts of the social enterprises, it could be concluded that it will be a sufficient tool for the socio-economical empowerment of some of the deprived groups of Rotterdam South neighborhoods because it will provide jobs, increase the skills and information of the people and it makes an improve in the public facilities of a neighborhood. As a conclusion for this part, in the diagram in the next page an overview of the proposal tools for the socio-economic empowerment of the neighborhoods of study is shown which is about the type and the target group of the proposal tool.
2.3.5 Conclusion

According to what mentioned in the previous pages, it could be concluded that different problems and potentials for promoting the economic activities exist in the socio-economical deprived neighborhoods. The important thing that should be considered for proposing a strategy is the fact that focusing on one aspect (type) of economical improvement won’t be a sufficient solution for empowering the people living in deprived neighborhoods because the level and type of deprivation among these people are different, for example, facilitating the local enterprises could be efficient for the ones who have a better economical status and have a minimum of skills and experiences, but the other groups of people who are more deprived in terms of money or skills need to be empowered in other ways. So empowerment in different types of economical activities is needed. This is the main reason that the strategy is proposed various tools for facilitating different type of economic activities (check diagram 18).

For implementing an economical empowerment strategy, it is necessary to consider both area-based approach and people-based approach to improve them simultaneously. In other words, a strategy is needed to help the residents of these neighborhoods improve their economical situation and at the same time, the physical environment should be improved to provide the basis for economical activities of the residents as well as the investments from outside of the neighborhood. For understanding how this idea could be practical in the neighborhoods of study, some analysis has been done in relation to the micro businesses and socio-spatial context related to it which is presented in the next chapter.

Diagram 18 - the proposal tools for Socio-Economic Empowerment, By Author inspired by Teasdale, 2009; Carpenter, 2013

- **Social Enterprise**
  - Improve skills and create job
  - Improve social interactions

- **Ethnic Enterprise**
  - Create jobs
  - Provide public facilities

- **Informal Economy**
  - Exchange of goods and services
  - Increase social interactions
  - Source of income
3. Analysis

http://st-ar.nl/rotterdam-zuid
3.1 Concept derived from the research

As it has explained in the previous chapter, the proposal strategy will focus on increasing the number of different kind of enterprises in order to promote the socio-economic situation of Rotterdam South neighborhoods. It is necessary to mention that this strategy will not only focus on the local scale but it will also consider the enterprises which could have a bigger scale of performance, specially in the case of ethnic enterprises which could be interesting for the people living in other parts of the city with Dutch background. This idea will attract the capital to these areas in one hand and on the other hand it could facilitate the social mix of the people in a way to decrease the disconnection of South and North part of the city. Overall diversity both in the scale of performance of enterprises and the type of them is one of the main focuses in the proposal concept. In the map number17, the proposal design concept is introduced. For transferring this proposal concept to a design, analysis both in the city scale and neighborhood scale is done in the next pages which is focused on five main components.
3.2 Main components of the analysis

The distribution and spatial location of enterprises and shops is a pattern that is based on the characteristics of the city like routes integration and typology of the buildings (Joosten & van Nes, 2005, p.1). According to Joosten et al (2005), the distribution of enterprises is mainly influenced by the public transit, population density and street configuration in a bigger scale and elements like typology of the buildings, block size and diversity of the buildings, mainly about their age of construction, also becomes important in a smaller scale. According to this declaration and the explanations in the previous page, the first part of the analysis chapter will focus on these factors for understanding the potential areas or routes for allocating to enterprises both in the scale of performance of the city and local scale. In addition to this, these spatial factors will be recognized in integration with the social context, specially for ethnic enterprises. The result of the analysis part will be some proposal patterns in order to facilitate the socio-economic empowerment in Rotterdam South neighborhoods.
3.2.1 Accessibility

Accessibility in macro scale by car

The first step towards a proposal spatial strategy is to understand the routes which have more potentials or necessity to be the location of enterprises in Rotterdam South. Considering the main strategy, this analysis will be done both in a macro scale, for the enterprises which are going to perform in the city or district scale and also for the micro enterprises which are going to act in a local scale. This will be done by analysing the rate of the routes, their accessibility to public transport, the degree of street integration and the current situation of these routes in terms of the existence or non-existence of enterprises. The result of the integration of these analysis will be a map which specify the potential routes for allocating to different types of enterprises.

In the map number18 the rate of the routes for transportation by car is shown. This map could be a reflector of the accessibility of these routes which is a crucial factor for enterprises. In addition to this the degree of integration of these routes is needed to be analysed to get a comprehensive understanding of these streets which is done in the next pages.
Accessibility by bike is another factor that needs to be evaluated for proposing spatial location of enterprises, at this stage more city scale performing is considered. A lot of people from the other side of the river would use bikes for going to Rotterdam South, so in the map number 19 bike routes from Rotterdam North to Rotterdam South is analysed. As it has simplified in the map number 20, there are two bike trail routes from North to South; one of them is the edge street of Afrikaanderwijk which has a continuous bike friendly route passes through the neighborhoods of study (the red dashed line in the diagram below). This conclusion will be tested by the following space syntax analysis to check if these routes which have good accessibility both by car and bike are appropriate for the enterprises with a city scale of performance or not.

Map 19 - Accessibility in the city scale by bike - based on www.Googlemaps.com, By author

Map 20 - The most continuous bike routes from North Rotterdam to Rotterdam South, based on map 19, By author
Accessibility - Public transport

Another factor that needs to be explored in case of accessibility of the routes is the access to public transport which is crucial for the success of the enterprises. Map number 21 shows different types of public transport for the neighborhoods of study. Afrikaanderwijk is well accessible because a metro line (and station) is located in its western edge. In addition to this, tram number 20 passes from its eastern edge every 7 minutes also a bus line passes through one of the inner routes of this neighborhood. Bloemhof and Carnisse are also well accessible because of the existence of tram lines (tram number 2 which passes every 20 min) and bus lines on the edges and inner routes of these neighborhoods. But for Tarwewijk the situation is different; no bus line passes from the inner routes or the edges of this neighborhood and the tram line which passes by it is located on the edge street of the neighborhood which has a low permeability for going through the neighborhood and has a very few number of enterprises. Some probable interventions for this issue is proposed in the next pages.
As it has mentioned before the accessibility to the area of study by public transport is one of the factors that effect the proposal location and type of the proposal future enterprises. As it is shown in the map number 22, Afrikaanderwijk has a good coverage of public transport by different modes but for Bloemhof and Tarwewijk the situation is different. In the area of southern part of Bloemhof and strewelsweg street the accessibility to public transport is not that well. This issue is impliable to Tarwewijk as well because some areas in the centre of this neighborhood are not well-covered by any kind of public transport.

Note: the radius of performance of different modes of transport which are used in this map are according to the measures mentioned in a report named Urban potentials of Buiksloterham by M.Berghauser Pont, A.van Ness and B. Hausleitner, 2011.
Potential interventions based on the previous map

According to the explanations in the previous page two different proposals could be considered for the problem mentioned. One is about increasing the accessibility of Tarwewijk by adding a bus line in one of the edge streets of this neighborhood or one of the most public inner routes of this neighborhood (check map number 23). This proposal could have positive impacts on increasing the number of micro enterprises in this route.

In addition to this, the route in which the tram stations are located in Tarwewijk has a low permeability because of the high length of the blocks in this route. This could be considered in the design by proposing solutions in order to increase the permeability of the neighborhood.

Map 23- Proposal interventions for increasing the accessibility and permeability of Tarwewijk and its probable effect on the enterprises in this neighborhood, By author
3.2.2 Spatial configuration of the enterprises
Spatial dispersal of enterprises in the city

The spatial disperse of the enterprises in the city of Rotterdam is shown in the map number24. Making a comparison between Rotterdam South and the other parts of the city shows considerable differences, for example shortage of continious shopping routes in the area of study and the few number of economic clusters are some of these differences.

Even some of the the most public inner routes of the neighborhoods of study do not have a continiuity and concentration of local enterprises and are more mono-functional. This could be one of the reasons of non-vitality of these routes. This issue is relevent also for Tarwewijk in which there is no shopping route inside it and most of the businesses in this neighborhoods are distributed in different spatial locations as a single shop. The only continious bussiness routes of Tarwewijk are located on the edges of this neighborhood.

For Carnisse the situation is different because there is a continous shopping route which passes through the neighborhood with considerable number of local businesses and a big shopping mall (Zuidplein) is located on its edge. In the following the relation between the spatial dispersal of the enterprises and the degree of the integration of the routes in which they are located is analysed.
Spatial dispersal of enterprises in relation to the streets degree of integration

The spatial distribution of the enterprises on the edge of the neighborhoods of study, which some of them are regional routes (Laan op zuid, Maashaven, Drodstelaan and Brielselaan) and some of them are local routes (Bijerlandselaan, Strawelsweg, Pleinweg, and Dropsweg), are shown in the map number 25.

The most densely street in terms of the existence of enterprises is Bijerlandselaan which according to the map number 26 is one of the most integrated routes in the city scale. In diagram 21 the most densely and least densely routes in terms of enterprises existence is shown. According to this analysis probable streets of intervention for allocating to different type of enterprises could be recognized.
Spatial dispersal of enterprises in relation to the streets degree of integration

The spatial distribution of the enterprises in the inner routes of the neighborhoods of study is shown in the map number 27. Different patterns of this spatial dispersal could be recognized which is presented in the next page. For example in Afrikaanderwijk there is an enterprise cluster in the west side of the neighborhood and it has the potential to be integrated with Afrikaandeeplein which is the only public pace in this neighborhood. In Bloemhof the local enterprises cluster has a weak relation with Lang Hilleweg, the route which has the potential to be one of the most public and vital routes in this neighborhood because of its high integration and the typology of the buildings in this street. But for Tarwewijk no cluster in this relation exists and it has only single distributed shops which are not integrated with the existing public spaces in this neighborhood.
Patterns of spatial dispersal of enterprises in relation to the public routes/spaces

Diagram 22: Patterns of the spatial distribution of economic clusters in relation to the public spaces and most integrated routes of the neighborhoods, By author

Map 29: Patterns of the spatial dispersal of enterprises in relation to the community spaces and high-integrated routes of the neighborhoods of study, By author

Afrikaanderwijk

Bloemhof

Tarwewijk

Carnisse

Integrate the public space and enterprise routes
Probable interventions based on the previous map

Afrikaanderwijk

Integrate the public space and enterprise routes

Bloemhof

Increase the number of enterprises in the highly integrated routes/spaces

Tarweijk

Increase the economic activities, temporary or permanently, in the semi-public spaces and public routes of the neighborhood
3.2.3 Typology of the buildings and enterprises
The enterprises which are located in the neighborhoods of study could be categorized in three main classes: retail, services and manufacturing. Each of these enterprises make different pattern of usage for example the ones that could be classified in the retail like mini-markets, bakeries or groceries are being used in a daily basis so they have a more dense usage each day while most of the service-based enterprises like car repairs are not being used daily. According to this fact and after a site visit some maps are produced which is shown the classification of the enterprises according to the time period of usage and patterns of flow of people to these enterprises. For Afrikaanderwijk as it is shown in the map, most of the daily-based enterprises are located in the Pretorialaan street so there is a flow of people from different parts of the neighborhood to this street mainly in the morning and evening.

According to the field visit most of the people, especially women who go for the daily shopping activities path through Zuidplein for going to the shopping cluster and they do not take the routes around this big green public space while there are some potentials for adding enterprises or temporary economic activities in these surrounded routes which could not only be a catalyst for integrating the public space with economic activities but could also be the continuity and complementary of the existing enterprise cluster. In the neighborhood of Bloemhof the main flow of people is to the edge route of this neighborhood (Bijerlandselaan) because a lot of daily-based enterprises are located in this street. Also a local route inside the neighborhood is occupied by number of daily-based enterprises as it has shown in the map number 30. this street is the only local street which makes the concentration of local people for socio-economic activities. Although another route (Laang Hillweg) exists in this neighborhood which passes from the middle of the neighborhood and is well-accessible by car and public transport (this route is the most integrated route in this neighborhood in the local scale) and have proper spatial features like a linear green space in the middle of it, for being a vital local street, but only a few number of businesses exists in it which the daily ones are Lidle, a bakery and a pharmacy and some of them which are not daily-based enterprises are a tailor and a second-handshop. According to the observations of the author and the analysis which has been presented before, this street has the potential to be a place for different kind of economic activities, it could become one of the most vital routes of this neighborhood, a place where a lot of economic and social interactions could take place.

In Tarwewijk there is no local route which could be considered as the attractor of the flow of people, most of the businesses in this neighborhood are distributed in different spatial parts. In other words there is no spatial concentration of businesses in this neighborhood. According to the observation of the author a lot of people living in Tarwewijk go to the edge streets of this neighborhood for providing their daily needs. So the potential interventions for Tarwewijk could be the increase of local businesse inside the neighborhood and according to the analysis the potential street for this is Mijnsherenlaan. This street is the widest and one of the best locally integrated in Tarwewijk with a lot of left-over space under the high line metro passing through it. In addition to this there typology of the buildings in this neighborhood are in a way that they could easily change from dwellings to enterprises in the ground floor as two or three of them has already poped-up by the inhabitants; a hair dresser, a carpenter and a chinese massage. According to these features this street could be a potential route for both production and consumption-based economic activities.

In addition to this in this neighborhood several semi-public spaces exist which are non-vital and are surrounded only by dwellings. These spaces could be used for production-based economic activities like community gardens or any other activities which could have both economical and social effects.

In Carnisse because of the existence of a big shopping mall, Zuidplein, most of the flow of people is in that direction and a considerable concentration of people could be recognized in this area. This shopping mall attracts a lot of people also from Tarwewijk and Bloemhof. The effect of this economic spot on these four neighborhoods and the economic interaction in between the neighborhoods of study is explained in the next pages.
Type of the enterprises and patterns of the flow of people according to them

Map 30: Flow of local people in relation to enterprises, By author based on observations in the field work
Map 30- Flow of local people in relation to enterprises, by author based on observations in the field work.

Picture 39-Zuidplein the big shopping mall of Rotterdam South, http://www.zuidplein.nl/
3.2.4 Economic system and the enterprises

Economical system and the flux that it makes inbetween the neighborhoods

One of the other factors that needs to be analysed is the economical interactions in between the neighborhoods of study. As it is shown in the map number 31, some of the economical spots in the area of study have a district scale of performance like Zuidplein which is the shopping mall of Rotterdam south (the pictures on the previous page are related to this shopping mall). It is predictable that this economical spot attracts a lot of people from the neighborhoods of study or in other words it makes an economical competition for the other small businesses which are going to pop-up in these neighborhoods. According to this explanation the author believes that the proposal enterprises for the neighborhoods of study are better to be the complementary of the current businesses. The current businesses are mainly consumption-based, so it could be sufficient to add kind of businesses which are based on production, for example community gardens or any other economic activities which could involve the residents of this neighborhood in the economic process. In addition to this temporary economic activities (like local markets) could also be a solution for promoting the role of these neighborhoods in the economical system.
3.2.5 Social context and the enterprises: Spatial potentials for ethnic enterprises

The analysis that has been done in the previous pages was more about understanding the existing enterprises in the neighborhoods of study in a spatial context which has been done by exploring the spatial dispersal of these enterprises, type of these enterprises, their distribution in relation to the street configuration and the typology of them. In addition to this the degree of integration of the enterprises with the public spaces and community routes has been done and patterns in this relation were presented. The existing situation could help to understand the potentials and weaknesses that need to be solved in case of the enterprises in the neighborhoods of study. But another aspect is needed to be analysed in this spatial context which is the social context of the neighborhoods; the ethnic spatial distribution in these neighborhoods is a factor which could affect the proposal spatial location and type of the ethnic enterprises that is going to be added in these neighborhoods according to the main strategy. So in the following a brief analysis in this relation is done which is an integration of the spatial and social context.
The density of the ethnic groups in the dwelling blocks are shown in the map number32. According to this map in Bloemhof a clear spatial division of the neighborhood in terms of ethnicity could be recognised (check diagram number24), because of this fact the route which is located in between these to parts (the same route that mentioned in the previous analysis as the potential route for allocating to more economic activities) could act as a catalyst for social mix which could become practical by adding micro enterprises and designing public spaces in this route.
Existing ethnic enterprises and the potential routes for them

As it has explained in the previous chapter, high percentage of ethnic minorities live in the four neighborhoods of study. For understanding the potential places or routes for implementing the local immigrant businesses, it is necessary to know the spatial distribution of these groups in the neighborhoods. This has shown in the previous map from which the map number 33 is concluded. In this map the routes which have a high degree of publicness (integration) in one hand and are located in between two different social groups concentration (Dutch and immigrants) on the other hand are considered as the most potential routes for allocating to ethnic businesses.
According to the site visit the existing ethnic enterprises in the neighborhoods of study could be categorized mainly in these groups:

**Mini-markets + Grocery:** In Afrikaanderwijk two Turkish mini markets exist which both of them are located in the main enterprise cluster of this neighborhood (Pretorialaan street). Also in Bloemhof in Hillevliet street there are two market-grocery shops.

**Restaurant**

**Bakery:** A Turkish bakery is located in Paulkrugerstraat in Afrikaanderwijk and one next to Lidl in Langhilleweg in Bloemhof.

**Butcher:** An islamic (Turkish) butcher is located in Paulkrugerstraat which has its special clients mainly from Turkish and Marrocan background.

**Cafe:** The number of ethnic cafes are very limited in the neighborhoods of study. According to the observations of the author, there is one cafe latino in Bloemhof in Hillevliet and one italian cafe in Afrikaanderwijk.

**Hairdresser:** According to the field visit several ethnic hairdressers were observed in specially in Tatwewijk, Afrikaanderwijk and Bloemhof.

**Massage:** Two ethnic massage business was observed in Tarwewijk in Mijnsherenlaan street.
3.3 Proposal strategic instruments/patterns

The proposal patterns which are introduced above are made by the integration of the analysis results (in all the 5 different components introduced before which were the basis of the analysis chapter) and the former conclusions from the literature review. These patterns, the problem they are solving, the spatio-functional requirements for making them practical and probable areas of implementation for each of them are presented in the next pages. The output of the combination of these patterns will be the proposal strategy plan which is the first step towards the design.
**1- City-scale attractor**

**Context**

Deprived neighborhoods are known as no-go areas because of their social problems. This issue intensifies the decline of their economy mainly the business sector. Creating an economical magnet which could be interesting for the people of the city (or tourists) will reduce this issue.

**Solution**

Adding ethnic businesses/events which could take advantage of the different social context (multicultural environment) of these areas in order to attract the middle/high income people will be a solution to the problem mentioned above. It will also be a catalyst for poping-up local businesses in deprived neighborhoods and will act as a tool for increasing the social mix in one hand and on the other hand an economical driven force for immigrant businesses.

**Spatio/functional requirements**

- Well-integrated routes/spaces in the city scale
- Cultural-related functions (restaurant, supermarket, museum, food festival,..)

**References**

Rath & Kloosterman (1997), refer to page 52 of the thesis

**Probable area of implementation in Rotterdam South**

Hillevlietstraat Bloemhof+
Pretorialaan Afrikanderwijk

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**2- Economic co-operation**

**Context**

Deprived neighborhoods do not have enough economic power by their own in terms of the existence (or the opportunity to pop-up) variety of micro businesses. This issue makes the necessity to make them involve in an economical system with other neighborhoods which could provide an opportunity for start-up businesses.

**Solution**

Involvement in an economical system could become practical by making a co-operation (instead of competition) of the economical clusters in or in-between the neighborhoods. This co-operation could be recognized in different ways/scales as it is explained in the following:

**Spatio/functional requirements**

- Good connectivity between the economic clusters (in/in-between the neighborhoods).
- Functional co-operation between the businesses (like production based and consumption-based businesses).
- Functional co-operation and sharing the space for different economic activities.
- Co-operation between sectors (public, private, local people) in terms of economical interactions

**References**

Probable area of implementation in Rotterdam South

All the four neighborhoods of study

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* The underlined sentences in the solution explanation of each pattern, are the hypothesis that the pattern is build up according to it.
Community businesses (kind of social enterprises) which could provide a platform for economic activities in one hand and social interactions on the other hand will be a proper solution for this issue.

**Spatio/functional requirements**
- Public or semi public spaces which could be used for community activities like community gardens, ... .
- Strategic locations like routes which are social borders in a spatial way (refer to page number 79) which could turn to a spatial centre for socio-economic

**References**
Project reference: Kolenkit Amsterdam
We own the city, 2014

---

In the deprived neighborhoods like Rotterdam South most of the people do not afford to rent a place for starting small businesses and the lack of small businesses reduces the economic and social vitality of these neighborhoods.

**Spatio/functional requirements**
- Undefined spaces which are not in any use.
- Public spaces

**References**
Hudson & Shaw, 2011: Contested uses within the left-over spaces of the city
## 5- Economic activity in the most public routes

![Picture](small businesses cohesion.png)

**Context**

Providing a situation (both economical and spatial) for increasing the number of micro enterprises in well-integrated routes of the neighborhoods in a way to create/ intensify the economic activities will bring vitality, both in the economic and social aspect to the streets.

**Spatio/functional requirements**

- Building typologies (mainly the ground floor) or temporary spaces which provide a context for economic activities.
- Decrease the car traffic and increase the pedestrian and bike-friendliness of the route.
- Providing a proper context for diversity of businesses.

**Probable area of implementation in Rotterdam South**

| LangHillweg Bloemhof |

**References**

Some of the well-integrated (in the local scale) and very well accessible routes of the neighborhoods of study do not benefit from their features and they have only a few number and single local businesses which weaken the socio-economic vitality of these routes.

## 6- Public space facilitator of socio-economic interactions

![Diagram](Public space and local businesses integration.png)

**Context**

Most of the public spaces in the neighborhood of study (except the playgrounds) are not being used regularly, they are non-vital spaces and one of the reasons for this issue is the mono-functionality of the blocks which the public spaces are surrounded by.

**Solution**

Increase the quality of public spaces in a way to facilitate different socio-economic activities could increase the interactions between people.

**Spatio/functional requirements**

- Temporary spaces for temporary economic activities in public spaces.
- Add local businesses (cafes, groceries, ..) on the ground floor of the buildings which are related to public spaces.

**Probable area of implementation in Rotterdam South**

| Afrikaandeplein, Afrikaanderwijk |

**References**

Most of the public spaces in the neighborhood of study (except the playgrounds) are not being used regularly, they are non-vital spaces and one of the reasons for this issue is the mono-functionality of the blocks which the public spaces are surrounded by.

Sustainable cities collective.com, LQC transform the public space.
7- Economic cluster permeability

Context
Low permeability of the existing economical clusters and spatial barriers in this relation is a factor that needs to be tackled. This could be related to pattern number 1 because for making an economical cooperation proper physical connectivity and permeability is needed.

Solution
Increase the permeability of the current business clusters in the neighborhoods.

Spatio/functional requirements
- Decrease the spatial tackles like long-length blocks and make physical connections in the areas which are needed to be well-accessible

References
J. Jacobs, 1961. Death and life of great American cities

Probable area of implementation in Rotterdam South
Volphaertsbocht, Tarwewijk and Bloemhof

8- Social Economy

Context
In the deprived neighborhoods the abilities and skills of the people become wasted because they have no opportunity for entering the market and these neighborhoods are consumers more than producers.

Solution
Providing a context for using the existing skills and abilities or helping the people to gain some skills will increase the opportunities for the deprived local people to promote their situation and a balance will be created in the economical system of these neighborhoods in terms of the combination of production and consumption based activities.

- Social enterprises which are places for both training and trading like different workshops, organic farms, rooftop gardening, ...
- Using the high number of vacant buildings in the neighborhoods of study for starting up social businesses.

Spatio/functional requirements

References
Carpenter, 2013 refer to page 56 of the thesis
Project reference: Mullumbimby community garden, Australia

Probable area of implementation in Rotterdam South
Tarwewijk and Bloemhof
### 9- Pedestrian friendly

**Context**
Non-pedestrian/bike friendly streets which are occupied by cars and most of the available spaces of them are allocated to car parking cannot be a successful local business area.

**Solution**
Design pedestrian/bike friendly routes

- Decrease the density of cars parked alongside the streets
- Add/adapt green routes for the pedestrian usage
- Provide clear and continuous pedestrian access

**Probable area of implementation in Rotterdam South**

<table>
<thead>
<tr>
<th>References</th>
<th>J.Gehl, 2010, Cities for people</th>
</tr>
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</table>

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### 10- Encouraging policies

**Context**
Starting-up local businesses in deprived neighborhoods is not easy because of the deprivation of the local people and lack of financial sources and information about the job market.

**Solution**
Implementing some encouraging policies like financial supports or discount taxes will be a solution for helping the deprived to start-up their own business.

**Spatio/functional requirements**
- Because this pattern is about policies, there is no specific spatio-functional requirement for it.

**References**
Lyon, Sepulveda & Syrett, 2007 refer to page 54 of the thesis

**Probable area of implementation in Rotterdam South**

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11- Ethnic economy: Local social mixer

Weak social interactions in highly concentrated of immigrants neighborhoods between the Dutch and non-Dutch is a great concern in Rotterdam South neighborhoods. This issue makes a need to a solution for facilitating the social interaction of these different social groups.

Solution

Increase the number of small ethnic businesses which will be interesting for the native Dutch people as well, will help to the economic empowerment of the local people in one hand and on the other hand it will facilitate the social mix of the people living in multicultural neighborhoods.

Spatio/functional requirements

- Strategic locations like routes which are the spatial divider of the social groups (refer to page 80) for allocating to local ethnis businesses.
- Ethnic related activities, services, ...

References

Rath & Kloosterman, 1997. Refer to page 52 of the thesis

Probable area of implementation in Rotterdam South

Lang Hillweg, Bloemhof

12- Working-living blocks

Mono-functionality of the blocks in deprived neighborhoods and lack of places which could be a platform for economic activities is a crucial issue in the deprived neighborhoods.

Solution

Considering the deprivation of the inhabitants, providing spaces attached to the living environment which could be a working place for this people will be a solution. This solution could be seen in a wider perspective for different type of businesses.

Spatio/functional requirements

- Dwelling typologies which facilitates the mix of functions
- Attached spaces or functionaly flexible ground floor of the dwellings in a way to facilitate non-living activities

References

H. Engel, E. van Velzen & O. van de Val, 2013
Renewing city renewal

Probable area of implementation in Rotterdam South

Mijnsherenlaan, Tarwewijk
### 13- Multi-functional centre

**Context**
Lack of a spatial centre (community centre) is one of the issues in the deprived neighborhoods of study which could decrease the chance of social and economical interactions in between the local people.

**Solution**
Designing community centres, places which facilitates different functions for different user groups of a neighborhood could provide an opportunity for variety of socio-economic activities.

**Spatio/functional requirements**
- Well-accessible spot in a neighborhood.
- Variety of functions facilitated by the spatial design of the open spaces, buildings, ... .
- Variety of spaces in terms of degree of publicness

**Probable area of implementation in Rotterdam South**
Tarwewijk, Bloemhof and Carnisse

**References**
Houston project: From Poverty to Empowered, http://spartinaconsulting.com

### 14- Space sharing

**Context**
In the neighborhoods with high concentration of low-income people, most of the people who are willing to start an enterprise can not afford the rent of the spaces.

**Solution**
Using the space in a shared way which could provide the opportunity of using it for different functions at the same time or different times could be a solution for the small scale enterprises which are going to start their business.

**Spatio/functional requirements**
- Spaces with the capacity of multi-functional usage.
- Using the current spaces like the schools which re working a limit time for other (socio-economic) activities

**Probable area of implementation in Rotterdam South**
Parcels of the dwelling blocks which has the potential to be transfered to a space for enterprises sharing.

**References**
next space project in the United states, http://nextspace.us/

**References**
Parcels of the dwelling blocks which has the potential to be transfered to a space for enterprises sharing.
The classification of the proposal patterns is shown in the diagram above which is related to the conclusion from the literature review which has mentioned that this project is going to focus on layers of programmes, people, Public spaces, Buildings and the spatial networks (check diagram number 12). As it is obvious from the diagram, each of the patterns will have different areas of focus; spatial based interventions, functional or people based interventions, or even a multi-layer area of focus. Most of the proposal patterns could be classified in this last type.

<table>
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<tr>
<th>Proposal Pattern Number</th>
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<th>6</th>
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</table>

Diagram 34- Classification of the proposal patterns according to their area (layer) of focus, By Author
As it has shown in the diagram above, the proposal patterns could be categorized in different scales and different fields of performances; some of them needs interventions in a wider scale like policies and planning (these are the ones which are more related to the proposal policies for encouraging the local business start-ups) while the others are more related to a smaller scale interventions like the neighborhood, public space, street or a block. This variety in the patterns as tools for starting the design could lead to a comprehensive design proposal.
This diagram will help to gain a better understanding of the necessity of applying each pattern in different stages by proposing two criterias for understanding the emergency of applying the pattern; in one hand the budget which is needed to allocated for implementing the pattern and on the other hand the effect that the pattern will have on the purchase power of the people. It is necessary to mention that this diagram and the priority that it is proposing could be flexible in terms of the spatial location of implementing the patterns. Overall this diagram will help for phasing the proposal strategy because it clarifies the priorities which is introduced in the following.
Unique pattern

A big intervention which is needed to be implemented in a specific location (not a flexible spatial choice for implementing it) and could be integrated with other smaller interventions (patterns). In the proposal patterns, there is only one type of this pattern which is the city scale attractor ethnic enterprises. This pattern have to be implemented in the spatial location which is mentioned in the map number 35.

Example

Pattern1: City scale attractor

Independent pattern

The area of implementation in not unique, could be implemented in several spatial locations and does not depend on the fulfill of any other patterns. So their is a flexibility in terms of the spatial location of implementing this type of pattern which makes the probability of fulfilling it higher.

Pattern6: Vital public space

Pattern3: Productive space

Pattern8: Social Economy

Dependent pattern

Applying this pattern depends on the fulfill of some of the other patterns. Because of this, these type of patterns wont be done in the first phases of the project and they are mainly patterns with lower priorities (check diagram 36 for the priority of the patterns).

Pattern2: Economic co-operation
The proposal strategic plan is about series of actions, which in the case of this thesis is about implementing the proposal patterns, for achieving the main goal. These actions will be done in different phases according to the priority (check the diagram number 36) and the spatial location of applying the patterns. The first phase will be more about the pattern related to policies which will facilitate the context for local enterprises start-ups and helping the local deprived people who want to build up their own business to gain a better understanding of the market environment. In addition to this, in this stage with the help of the civil society and the municipality, the social enterprises will start to pop-up in order to discover the existing talents and skills of the people in Rotterdam south which could be a start for an economic activity. This part will become practical by holding some workshops and allocating some work spaces to these people. Furthermore the first pattern, city scale attractor enterprise, could become practical in this stage because it will be a driven force for the other enterprises to be started.

The next phase will focus on the proposal patterns which will provide a spatial framework for the economic activities in the neighborhoods of study and will include interventions in different scales and different spatial components; making the integration of the existing public spaces with local businesses, designing productive spaces where the community economic activity could take place, integrating the living and working in the blocks, design pedestrian friendly streets which could support the local businesses, etc. (the patterns related to this phase are shown in the next page in the diagram number 37). This stage needs the co-operation of the housing associations, municipality and the local people. The last phase of the strategy which could be considered as a long-term intervention will be about increasing the co-operation between the public and private investment with the co-operation of local people in order to provide a more successful local business environment. In the next page the proposal phases of the strategy, the patterns which should be implemented in each phase and the actors that needs to be involved in each phase is introduced and in the next pages the spatial reflector of these different phases is introduced.
According to all the analysis which has been presented in the previous pages, the potential areas of implementing the patterns are introduced in the map above which are mainly the most public routes/spaces in these neighborhoods. In the neighborhood of Afrikaanderwijk the Pretorilaan street which is the continuity of the most enterprise concentration route in this area in one hand and on the other hand passes alongside the Zuidplein, the main public space of this neighborhood, will be the concentration area for the design. Also in Bloemhof Lange Hilleweg street and Hillevliet street which are both the most integrated routes of this neighborhood and have special spatial features like linear green spaces, wide width and have the potential to become enterprise clusters, will be the main spatial areas of focus. For Tarwewijk Mijnsherenlaan street and some of the public/semi-public spaces recognized as the areas for implementing the proposal patterns and in the end for Carnisse the main areas of focus will be the continuity of the existing shopping routes and two of the public green spaces in this neighborhood.
3.4.1.1 Actors involved in the strategic plan

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<tr>
<th>Years</th>
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<th>5</th>
<th>10</th>
<th>15</th>
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<tbody>
<tr>
<td>Phase 1</td>
<td>Providing the general framework for socio-economic activities + Implement a catalyst for local business start up • Encouraging policies for enterprise start-ups • Giving information about the market and enterprises to local people • Ethnic business with the city scale of performance as a driven force for starting-up local businesses</td>
<td>patterns 1-10</td>
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<tr>
<td>Phase 2</td>
<td>Providing spatial framework for socio-economic activities • Make spatial changes in the buildings, blocks, streets, public spaces etc in a way to facilitate different socio-economic activities. • Local people start their economic activities in social or ethnic enterprises or community economic activities</td>
<td>patterns 2-3-4-5-6-7-9-11-12-13-14</td>
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<tr>
<td>Phase 3</td>
<td>• Private sector investment in the area increases and with the co-operation between different sectors (public, private and local people) a vital economic environment will be created.</td>
<td>pattern2</td>
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</table>

Diagram 37- Proposal phasing and the actors which is needed to be involved in each phase, By author
Empowerment type 1

Involve the people in the process of decision making (Refer to the third part of the literature review, page 50-48 and diagram 14).

**People participation for understanding their needs and demands in the socio-economic terms**

**Tools:**
- Community meeting
- Questioner
- Pannels for writing their ideas about social and economic issues and solutions for them which could be hanged in public spaces, schools, healthcares, ...

**Evaluation of the proposal patterns, by the local people**

**Tools:**
- City gaming
- Reference group meetings which will choose according to the main strategy (for example with ethnic groups or the people who are willing to start their own enterprises)

**Local people tell their idea about the design proposals**

**Tools:**
- Workshops with the local community in order to know their ideas about the preliminary design interventions which could help for selecting the best design choices

Empowerment type 2

Promote the socio-economic status of the deprived community: The main research question of the thesis (Refer to the third part of the literature review, page 50-48 and diagram 14).

**Diagram 38- Proposal tools for involving the participatory planning in different stages of the project, By Author**

Overall this diagram is showing the approach of this thesis which is in-between top-down and bottom-up approaches. The stages in which peoples participation could be involved the process is shown and the aim of involving them in each stage and the tools which could facilitate this involvement is presented above.

In the participatory planning and design, the awareness of the conflicts between stakeholders is crucial, for example the spatial location of implementation of some of the proposal patterns could not be agreed by some local people or the other owners like the housing associations. The tools which are mentioned above will help to understand these conflicts better. For example by doing the city gaming in which different stakeholders will be involved to tell their interest, these contrasts will become more clear which is the first step for finding a solution for these conflicts.

The author was not successful in involving the peoples participation in the process because of the limitations of the project which will be explained later in the reflection part of the thesis.
System of applying the patterns in relation to the stakeholders involved in each pattern and the proposal encouraging tools for fulfilling the patterns,
By Author.
3.4.1.2 Phases of the proposal strategy- Implementing the patterns

As it has explained before, the first phase of the proposal strategy will mainly focus on implementing the patterns which will provide a suitable framework for promoting the enterprises like encouraging policies. In addition to this, this stage will be the start of implementing the patterns with high degree of priority like adding enterprises with the city scale of performance which could attract the capital to these areas and be a driven force for starting-up local enterprises. This specific pattern will be implemented in Hillevliet street. In the neighborhood of Bloemhof designing public spaces in integration with the existing economical cluster and extention of local businesses on the ground floor of the blocks which are located next to the existing economical cluster will be the first step. For Tarwewijk the first stages will be facilitating the temporary economy under the high-line metro which is in the current situation in use of car parking. Facilitating the semi-public spaces for productive activities of the inhabitants will become true in the first stage.

Legend of the patterns
- Temporary economic activity
- Living-working blocks
- Pedestrian friendly
- Public space integrate with local business
- Extension of the local businesses
- Economic co-operation
- Productive space
- Ethnic economy
- City scale attractor
The second stage which in some cases depends on the fulfill of the first phase will more focus on providing the spatial necessities for implementing the proposal patterns. For example in the case of Tarwewijk, designing some public spaces in integration with the temporary economic activity under the high line metro (which will be done in the first phase) will be done in this stage or changing the mono-functional dwellings to mixed-use blocks for integrating the living and working alongside the Mijnsherenlaan street will become true in this phase. Also facilitating the economic co-operation in between Bloemhof and Tarwewijk will be done in the second phase by applying the pattern of pedestrian friendly routes, public space integration with local businesses and adding social enterprises. In Bloemhof extension of the local businesses and designing productive spaces in which community economic activities could take place will be part of the plan. More explicit explanations will be added in the design part.
The last phase of the proposal strategy will be the complementary of the second phase and it depends on the second phase to become true. This stage will more focus on providing spatial necessities for the economic co-operation between the neighborhoods of study, specially between Bloemhof and Tarwewijk, in one hand and on the other hand it will concentrate on the try to provide context for co-operation between public and private sector in order to promote the business attractiveness of the area of study.

Map37- Third phase of the strategy, implementing the proposal patterns, By author
4. Design
4.1 Mijnsheren Street
The first part of the design chapter will focus on the Mijnsherenlaan street in Tarwewijk. According to the proposal strategy, this street will become a place for temporary economic activities like local market. This will improve the economic interaction between neighborhoods considering the fact that in Bloemhof and Carnisse, the neighborhoods next to Tarwewijk, no local market exists. In addition to this, some of the blocks will be transformed from a mono-functional block to multi-functional ones in order to facilitate economic activities or a place for social enterprises. Furthermore, some of the semi-public spaces in this neighborhood which are not really vital in the current situation will be improved in a way to facilitate social interactions in one hand and on the other hand some of them will be transformed to productive spaces like community gardens. According to the analysis, this route has the potential to be allocated to some ethnic enterprises.

This part will start with a brief introduction of the spatial features of this street like the typology of the dwellings, the relation between entrance of the buildings with Mijnsherenlaan street, the width of the space under the highline metro,... and then the design proposals will be presented which shows how by using the existing spatial features or changing them in a way to facilitate more socio-economic activities, this neighborhood will become a better place for its inhabitants.

4.1.1 Mijnsherenlaan Analysis

Some enterprises has already popped up here
As it has shown in the section in the previous page, Mijnsherenlaan street is a wide route with a width of about 50 meters. The space above the high line metro which is passing through this street is occupied by cars in the current situation. The dwelling blocks alongside this route have a length of about 180 which influences the permeability of this very public route (according to the space syntax analysis in the previous chapter, Mijnsherenlaan is the most integrated route in Tarwewijk). According to the map number 38, a few number of non-dwelling functions exists in this route which are mainly located in the blocks near the two public spaces (refer to the map number 38). In addition to this as it has shown in the sketch above, the dwellings in both sides of this street are 5 floor buildings. Green space with a width of about 7 meters separates the car line from the pedestrian and bike lane.

Mijnsherenlaan current situation

As it has shown in the section in the previous page, Mijnsherenlaan street is a wide route with a width of about 50 meters. The space above the high line metro which is passing through this street is occupied by cars in the current situation. The dwelling blocks alongside this route have a length of about 180 which influences the permeability of this very public route (according to the space syntax analysis in the previous chapter, Mijnsherenlaan is the most integrated route in Tarwewijk). According to the map number 38, a few number of non-dwelling functions exists in this route which are mainly located in the blocks near the two public spaces (refer to the map number 38). In addition to this as it has shown in the sketch above, the dwellings in both sides of this street are 5 floor buildings. Green space with a width of about 7 meters separates the car line from the pedestrian and bike lane.

![Picture 61 - Mijnsherenlaan street, By author](image1)

![Picture 62 - Mijnsherenlaan street, By author](image2)
4.1.2 Design phases

First phase
- Some public facilities are already located in these blocks.
- Local market could be integrated with the two public green spaces in this location

Second or third phase
After the fulfilling the first phase this part could be started for the extension of the local market or other economic activities

Legend

- Dwelling
- Enterprise
- Green space
- High line metro

Map39- Proposal phases for the design of Mijnsherenlaan street, By author

Picture 63- Space under the highline in Mijnsherenlaan street, By author

Picture 64- Playground located in the first phase area in Mijnsherenlaan street, By author
4.1.3 Proposal interventions
4.1.3.1 Proposal interventions for adapting the programmes to the spatial context

<table>
<thead>
<tr>
<th>Current situation</th>
<th>Proposal intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public-private realm</strong></td>
<td></td>
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<tr>
<td>Pedestrian (public realm)</td>
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<tr>
<td>Dwelling</td>
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<tr>
<td><strong>Green space</strong></td>
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<tr>
<td>Public green space</td>
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<tr>
<td><strong>Block typology</strong></td>
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<tr>
<td>Proposal intervention for the dwelling blocks, By author</td>
<td></td>
</tr>
</tbody>
</table>

85m

Proposal intervention for the dwelling blocks, By author
4.1.3.2 Proposal interventions for adapting the programmes to the spatial context

Facade

Current situation

Proposal intervention

Proposal intervention for the dwelling blocks, By author
Proposal interventions for adapting the proposal functions to the spatial context

As it has shown in the diagrams in the previous page, some spatial interventions are necessary to be done in order to implement the proposal patterns. In other words spatial adaptation for the functional (programmatic) changes are a crucial part of the proposal design. In terms of the dwelling blocks, one of the proposal interventions will be the redefinition of the public-private realm in order to make the change from dwelling to dwelling-enterprises on the ground floor and creating a transition zone for this purpose. The other intervention will be about allocating a part of the public green in front of each block, which in the current situation is quite wide at least 6 meters, to collective spaces which could be used by the residents of the dwellings for activities like cultivating or sitting.

Another spatial change in the street will be about redefining the space under the highline metro which will be allocated to temporary local market. A pedestrian way will be designed alongside this space in order to facilitate the economic activities. For implementing this idea a parking space should be considered as in the current situation the space under the high line metro is being used for parking.
4.1.3.3 Mijnsherenlaan street proposal section

Proposal added elements

- Collective green space
- Space for local market
- Semi-private space
- Public green space for temporary activities

Diagram showing the layout with labels for semi-private space, pedestrian, bike line, collective green, public green, car park, car lane, temporary economic activity, pedestrian, car lane, public green, pedestrian, car park, collective green, pedestrian, and semi-private space.
4.1.3.4 Design Concept

Diagram 43- Design concept for the first phase, By author
Current situation plan

Map42- Current situation of the designed area, By author

Picture 66- Current situation of the designed space, Googlemaps

Picture 67- Current situation of the designed space, Googlemaps
As it has mentioned, the area of focus for the design is going to be a space which brings social unity, by attracting different ethnic groups of the neighborhood together, also spatial and functional unity will be reached by putting different functions in co-operation with each other in order to make an attractive community centre for Tarwewijk. As it is shown in the diagrams above, this is going to become practical by changing the programme of the current open spaces in this part; the two playgrounds are going to be replaced by public spaces. These two public spaces will have different functions; one will be a community centre in co-operation with the temporary local market and the other one will be more flexible in terms of its programme which could be an open space for holding community events or it could be only a stop place for the people who come to the local market, a place where they can seat and take a rest or children could play while their parents are doing the shopping in the local market. The space under the highline metro which in the current situation is an undefined space will be transformed to a local market, the proposal design for this space will be presented in the next pages.

It should mention that these proposals are in the same direction of the proposal strategy and the proposal patterns for this area; the community garden is for making the pattern of productive space real, also in the community centre some social and ethnic enterprises will be added which are among the proposal patterns according to what introduced in the previous pages.
This community garden will provide knowledge and skills for the inhabitants in relation to the urban gardening which will facilitate the rise of community gardens in other parts of the neighborhood like the semi-private courtyards of the blocks or other semi-public spaces.
Proposal Flexible public space

This space could be used in a flexible way, it could be a place for different community events (check picture number71) which bring the different cultures together in order to improve the social interactions which could have both social and economical effects. Some of the times when there is no community event it could be a complementary of the local market, a place where children can play when they perants are donig the shopping, or a place for rest after doing the shopping.
Proposal Flexible public space

Picture 72- Current situation of the designed space which is a playground, By author

Picture 73- Proposal design, By author
Picture 74- Current situation of the designed area which will transfer to a community centre, By author
Proposal functions for the community centre

Map43- Proposal functions of the designed community centre, By author
Local businesses on the ground floor (social and ethnic businesses)

Integration space for local businesses and public space

Pedestrian extension

Before

Diagram 46- Proposal changes for the street alongside the community centre, By author

After

Before

After

Diagram 46- Proposal changes for the street alongside the community centre, By author

Before

After

Diagram 46- Proposal changes for the street alongside the community centre, By author

Picture 75- Local businesses on the ground floor, http://hubrunner.com/

Picture 76- Local businesses extension, http://www.convivialspaces.org/
As it has shown in the picture below, this street will be transformed in a way to increase the public life. The social and economical interactions will be increased by allocating the ground floor, which is mainly mono functional dwellings in the current situation with few number of businesses, to multifunctional spaces mainly allocated to some social and ethnic businesses according to the proposal strategy for this area of Tarwewijk. Some encouraging policies like tax discounts are necessary for fulfilling this idea in order to facilitate the change of the ground floor of the dwellings to local businesses.

Current vacancies which could be used for transforming the current businesses, which are type of service based businesses which do not effect public life and community interactions, to a shared space so that the space could be used for social and ethnic businesses which increases the public life of the street.

Picture 77- Current situation, Googlemaps.com

Picture 78- Proposal design, By Author
The proposal community centre will be a place for different activities in order to provide a context for social and economical interactions which will bring different social and ethnic groups together. The spatial design for this community centre will facilitate this goal; practical landscape like green slopes will provide a space for laying or children playing, some open pavilions will be added which could be used for seating or BBQ making. The current building of the healthcare which is a one floor building with a wide roof will be used for roof-gardening; an activity which is both community based and productive. This space will have two important edges, one will be long stairs/seats which could be integrated with the local market under the highline metro and the other edge of this public space will be the integration of it with the ground floor businesses which could be the extension of the local businesses. Furthermore the green area in between the local market and this public space will be designed in a way to facilitate the extention of the local market in order to increase the co-operation of the market and the public space. Detailed proposal plan for this space will be added in the next pages.
In the designed community centre, different spatial elements will be used in order to provide basis for variety of socio-economic activities; different types of seating elements, from benches to linear stairs in integration with the landscape, as it has shown in the impression above, will be designed in this public space. The central pavilion which is designed with the aim of community gathering is shown in the next page. Also the integration of this public space with the temporary local market in one hand and on the other hand with the ground floor of the buildings which are going to be allocated to social and ethnic businesses, is considered in the design.
Social and Ethnic businesses on the ground floor

Local market under this high line metro

Integration of the local market with public space

Extension of the businesses and bar and restaurants

Roof top gardening, a place for community based socio-economic interactions

Integration of water and seating, linear seats

Integration of landscape and seating

Green space for laying, seating, community sport

Space for BBQ

Children’s playground

Circular central seating with pergola, for group seating

Space for BBQ

Green space for laying, seating, community sport

Children’s playground

Circular central seating with pergola, for group seating

Integration of water and seating, linear seats

Integration of landscape and seating

Space for BBQ

Green space for laying, seating, community sport

Children’s playground
4.2 Design- Heinenoordstraat
4.2.1 Heinenoordstraat Analysis

The second stage which in some cases depends on the fulfill of the first phase will more focus on providing the spatial necessities for implementing the proposal patterns. For example in the case of Tarwewijk, designing some public spaces in integration with the temporary economic activity under the high line metro (which will be done in the first phase) will be done in this stage or changing the mono-functional dwellings to muixed-use blocks for integrating the living and working alongside the Mijnsherenlaan street will become true in this phase. Also facilitating the economic co-operation in between Bloemhof and Tarwewijk will be done in the second phase by applying the pattern of pedestrian friendly
Picture 87- Current situation of Heineoordstraat, Googlemaps.com
4.2.2 Proposal Interventions

- continuity by specific green
- flexible public space
- playground
- school
- widening the pedestrian route
- corner shops with community-based functions

Diagram 47- Proposal changes for the street in order to make continuity, By author

Map47- Proposal plan for Heinenoordstraat, By author
As it has shown in the previous map, the main intervention in this route will be about creating continuity of the local business route from the neighborhood of Bloemhof to Tarwewijk’s local market (which will be there in the future according to the proposal strategy and what explained in the previous pages). This continuity will be made by adding special greenary which will act as a green axis, also a special pavements in this route will insist on this continuity. In addition to this programmes of the ground floor will be changed from dwellings to community-based programmes in the blocks which has this potential. These programmes could be flexible but the main idea for them is being the complementory of the community centre which is shown in the previous pages, for example, as it has shown in the impression above, a flower shop which sells the productions of the community garden of the designed community centre or a social enterprise like a bakery which has unemployed people as employees and will help them to gain skills will be the proposal programmes for this route.

Picture 87: Proposal Design for the Heineoordstraat, By author

Social enterprise

Production of the community gardens of the neighborhood
4.3 Design Evaluation
Variety of socio-economic activities

Before

One of the criterias for evaluating the final design interventions, is the level that it facilitates different type of socio-economic activities which was mentioned in the previous pages as one the sub aims of this project according to the main research question. Diagrams above are showing a comparison between the current situation and the situation after the proposal design. As it is obvious, the design leads to more variety of both social and economical activities by providing spaces for temporary economic activity, a community centre for social interactions, social enterprises which could be a combination of education and business and providing spaces for community socio-economic activities like community gardens.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Before</th>
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<tbody>
<tr>
<td>Local business</td>
<td>GoogleMaps.com</td>
</tr>
<tr>
<td>Social business</td>
<td>By author</td>
</tr>
<tr>
<td>Community centre</td>
<td>By author</td>
</tr>
<tr>
<td>Community garden</td>
<td>By author</td>
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</tbody>
</table>

After

<table>
<thead>
<tr>
<th>Spatial Location for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community centre</td>
</tr>
<tr>
<td>Local business</td>
</tr>
<tr>
<td>Community based socio-economic activity</td>
</tr>
<tr>
<td>Local social/ethnic businesses</td>
</tr>
<tr>
<td>Social activities in public space</td>
</tr>
<tr>
<td>Temporary socio-economic activity</td>
</tr>
</tbody>
</table>

Diagram 48- Type of the existing economic activities, By author

Diagram 49- Type of the proposal socio-economic activities, By author

Existing micro business, GoogleMaps.com

Social business, By author

Community activity, By author

Temporary economic activity, By author

Community garden, By author
Socio-Economic activities take place in the...

Before

Buildings

After

Buildings

Collective spaces

Public spaces

Roof gardens

Diagram 50: Spatial locations for socio-economic activities, comparison before and after the design, By author
Criteria 2: Facilitating socio-economic activities for variety of user groups

The second criteria for the design evaluation is the degree of variety which the design proposal will provide for different groups for having social and economical activities and by different user groups the author means different ages, ethnicities, social classes, .... It is also considering variety in terms of both individual and community based socio-economic activities. As it has shown in the diagram above, the area of focus in the design has been a platform almost only for the children because of the 3 playgrounds located in this spot, but after the design it will be a place where not only children can use for playing but also a community centre which will increase the social interactions of different ethnic groups, also a place where not only individual activities but also community interactions like social businesses and community events will take place.

As it has shown in the next page, each of the activities is facilitated by a specific spatial or functional element, for example the group gathering and community meetings is facilitated by the round seating element in the centre of the designed community centre and programmes like community events or social and ethnic businesses are the functional tools which will lead to the community gathering, or in the case of the community economic activities, the community garden on top of the healthcare building which is only one floor and another space in the other side of the highline metro will be the spatial location in which this kind of activities could take place. In the designed community centre different sitting elements like linear seatings or circular ones will provide spaces for both individual and community uses, the wide green spaces with higher height than the ground will provide a space for laying, sitting or community sports. The different spaces and activities which they will facilitate is shown in the next page.
Circular sitting facilities and a centered designed space will be a place for community gatherings.

Public space which will be a place for community events will facilitate community gatherings.

Multifunctional ground floor mainly occupied by ethnic and social enterprises will facilitate community activities.

Space under the highline metro and the edge of the public space will be used for local market.

Space on top of the 1st floor public building and the space on the other side of the highline metro will be used for community gardening.

Diagram 53: Spatio-Functional elements which are used for facilitating socio-economic activities for variety of user groups, all the diagrams and impressions are made by the author.
Criteria 3: Promoting the public/social life of the local people

Before

Diagram 54: Degree of publicness/public life in the current situation, By author

No public life in the streets in the current situation, By author

Degree of the publicness/public life

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>Before</td>
<td>①</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Only dwellings on the ground floor</td>
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<tr>
<td></td>
<td>Undefined green space in front of the dwellings</td>
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</table>

Diagram 55: Degree of publicness/public life after the design, By author

Dwelling and businesses on the ground floor have positive effect on public life of the street

Degree of the publicness/public life

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>After</td>
<td>②</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collective green spaces increases the social interactions between the neighbors</td>
<td></td>
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</table>

Proposal design which increases the public life, By author
Reflection

Problem statement and research question

The problem statement of this thesis which is mainly based on the theories of Saskia Sassen about the phenomena of polarization in the cities, bring up the hypothesis that the concentration of deprived groups in specific areas of a city, intensifies the socio-economic polarization in the city. The location of the project is Rotterdam South which is known as one of the most deprived areas in the Netherlands.

According to the preliminary research in relation to this problem statement, this issue could be solved in two different ways; one is focusing on the distribution of deprived groups in the city for tackling the concentration of them in a neighborhood in order to tackle the problem mentioned and the other way is about decreasing the poverty concentration or in other words trying to improve the socio-economic status of the inhabitants living in these areas. The second solution is the one which is the focus of this thesis and it is translated into the main research question of “which spatio-functional strategies will facilitate the socio-economic empowerment of the people living in deprived neighborhoods of Rotterdam South”.

Proposal interventions

Proposal interventions of this thesis as it could be understood from the research question are some interventions in the urban fabric, spatially or functionally, which could facilitate the social and economical activities in the deprived neighborhoods of study. These interventions are presented as twelve different proposal patterns in different scales of performances, from micro scale to macro scale, and different areas of focus, from planning to design, which is introduced in the methodical line of approach in the following.

The relation between the Methodical line of approach of the graduation lab and the method chosen by the student in this framework

In order to answer the main research question and the sub-research questions of the thesis, different methods has been used which could be categorized into two different classes; some of them (mainly in the analysis chapter) are ordinary ones like mapping, literature review, statistic review or checking reference projects while the other methods are more specific which are the ones that played the most important role in this project. Pattern making, a tool which is used for transferring the research to the design, is one of these examples. The proposal patterns in this thesis are from different areas and scales of performances; some of the patterns are related to the policies which could facilitate the socio-economic interactions in the deprived neighborhoods like encouraging policies, while some of the proposal patterns are more about spatial interventions and programmatic changes in the urban fabric.

It should be mentioned that the proposal patterns are not only specific for this project but could be implied to other areas with the similar context of this area; deprived neighborhoods with socio-economic problems and high concentration of low-income or unemployed people.

The relationship between the Research and the Design

As any other Urbanism academic projects, this thesis has a research part which is one of the main pillars of the whole project. The research which in this case contains both theoretical review and analysis was a driven force in all the steps of this project, from problem statement till the design part; it helps for clarifying the main research question, sub research questions, also the main proposal strategy of the thesis is based on the research which is done in relation to the different ways of socio-economical empowerment in deprived neighborhoods.

This proposal strategy in the next steps has been transferred to some proposal patterns, as the translation of the research to design. It should be mentioned that the part of pattern making was a stage in which no borders between the research and design existed.

The relation between the theme of the graduation lab and the subject chosen by the student

The topic of this graduation thesis is related to both Spatial Planning theme and the urban Design Fabric because the main goal of it is to make a socio-economical transformation in some of the deprived neighborhoods of Rotterdam South which could be realized only if the issue will be consider in both the planning and design scale. In other words for achieving a proper strategy for the social and economical empowerment, which is the main goal
of the transformation mentioned above, in one hand it is necessary to have solutions in the policy and planning scale and on the other hand some design intervention, which will be mainly spatio-functional ones according to the research question of the thesis, are needed in order to facilitate the socio-economic activities in a spatial way.

So this thesis is a combination of planning and design, but the author has chosen the Research group of the Urban Design Fabric because the main issue is to find out how the physical built environment with the function of it (program of the buildings, street, public space ...) could contribute to the socio-economic empowerment. This is in the same direction of the goal of the Urban Design Fabric group in TU Delft which is trying to propose spatial solutions towards a better quality of life in the cities.

**The relation between the project and the wider social context**
This thesis is dealing with a crucial subject from both social and economic aspect which is a great concern not only in the city of Rotterdam but also in most of the big cities in the advanced European countries. Providing a framework which could facilitate the socio-economic interactions of the low-income people will not only empower this people but also it will decrease the negative neighborhood effects of the deprived concentration which is one of the great concerns in the modern cities.

**Limitations of the project**
It is necessary to mention the limitations of this project in the reflection in order to explain some of the probable shortcomings. One of the most considerable lacks of this thesis is the ideas of the inhabitants of Rotterdam South neighborhoods about their needs and demands in the social and economical aspect. Being aware of how important is the involvement of the local people in the process of research and design, the author tried to communicate with the people in all the field works but it was not successful because most of the people living in these areas couldn’t speak English in one hand and on the other hand they were not willing to participate in the communication which is one of the common features of the people living in deprived neighborhoods according to the experience. Considering these limitations, the author tried to propose some solutions which could make the people involved in the process of decision making process which is done not directly by the communication of the local people and the author of this thesis, but it is about adding some proposal patterns in the pattern making process (which is fully-described in the booklet as a bridge between the design and the research) for facilitating the inhabitants involvement in the decision making. Considering this, in some of the patterns, the ways of people’s involvement is explained as a part of the requirements for applying the pattern and in some cases a separate pattern is defined in relation to the people’s involvement for the socio-economic empowerment. In this way, the effect of the limitations could be decreased.
Conclusion and Recommendations

This part will explain the summary of the thesis and the conclusions of each stage and in the end recommendations for the socio-economic empowerment of deprived neighborhoods will be introduced. This thesis was aiming for understanding the effects that spatial and functional strategies could have on promoting the social and economical status of the people living in deprived neighbourhoods of Rotterdam South who are mainly low-income or unemployed people with few opportunities for entering the job market.

Lots of literature review and analysis has been done in order to understand in one hand the social and economical context and on the other hand the spatial features of the deprived neighbourhoods. In addition to this, the effect that these two components can have on each other was explored which the result of it was gaining a clear understanding of the problems and potentials of these type of neighbourhoods; one of these potentials is specific type of commercial activities which is based on ethnic businesses. Considering the social context of these areas which has a high concentration of immigrants, there is a potential for immigrant businesses which could not only be considered as a local economic activity, but could also act as a city-scale economic attraction which will be a driven force for attracting capital to these socio-economic deprived neighbourhoods.

In addition to this, the other part of the research focused on reviewing the recent urban strategies for empowering the low-income neighbourhoods in the European countries. The conclusion of this part was involving the social enterprises as part of the proposal strategy because the experience has shown that in most of the advanced European countries like the UK, working on social enterprises as a solution for empowering the deprived groups has been effective because this type of enterprises are aiming for providing tools and spaces for work or education in order to help the deprived groups enter the job market. So focusing on both ethnic businesses and social businesses was one of the main pillars of the proposal strategy.

The other important step was aiming for transforming the proposal strategy to proposal design instruments which used pattern making as a bridge between the research and the design. Some proposal patterns are presented which is focused on transforming the urban fabric and the programme of it in order to facilitate the socio-economic empowerment of the mentioned group and are applicable to the other deprived neighbourhoods with the same context as Rotterdam South neighbourhoods. The conclusion for this part of the thesis showed that the urban fabric could be designed in a way to facilitate the empowerment of the deprived groups. This needs the consideration of different components of the urban fabric like the buildings, streets, public spaces, ... as the spaces in which different socio-economic activities could take place. Considering this, the proposal patterns are about interventions in different components of the urban fabric in one hand and on the other hand non-spatial interventions like proposal encouraging policies for facilitating different economic activities in these areas. For example transforming the mono-functional dwellings to multifunctional ones by transforming the ground floor of these buildings to areas for economic activities like ethnic businesses or allocating them to some workshop/business activities with the aim of training different skills to the unemployed people was one of the proposal patterns in the micro scale. Another example from the proposal patterns which needs interventions in both micro and macro scale and both design and planning is the productive neighbourhood pattern which is aiming for providing spaces for production-based socio-economic activities; like community gardens or social businesses which will mainly focus on providing production spaces, tools and skills for the deprived community. Overall fulfilling of most of the proposal patterns will provide variety of spaces and skills for the low income and unemployed people living in Rotterdam South for different social and economical activities. It is necessary to mention that applying these proposals in Rotterdam South neighbourhoods or any other neighbourhood with the same context, needs co-operation between different stakeholders like public sector, municipality, housing association, local people and even the NGOs. This could raise some conflicts because of the different interest of these groups. In the thesis some solutions for understanding these conflicts, mainly about the conflicts between the local people's ideas and the proposal solutions, is introduced which will be done by involving them in some of the stages like checking the proposal patterns with the people or know their ideas about the proposal design.

In the end, it should be mentioned that considering the needs and demands of the people from the lower classes of the social ladder and the try to provide an environment which facilitates the involvement of this people in the socio-economic system is crucial. Perhaps the Urbanism interventions could not make
a drastic change by itself and of course the co-operation of different sectors and fields from politics to economics is necessary for solving the problem, but it could at least provide the spatial basis and facilitate some policies in this relation.

Furthermore it should mention that facing the problems of deprived neighbourhoods needs a holistic, multi-layer and multi-scale approach because the core issues in these areas are caused by different aspects. This is why the proposed strategy in this thesis is considering socio-economical and spatial solutions simultaneously and in relation to each other which leads to the proposal patterns with variety of scales and areas of focus. Overall the author of this thesis believes that moving towards the equality in the urban life should be done by considering the deprived groups in the cities not as the problems, as they have been considered in the recent urban policies of Rotterdam which leads to the strategies of distributing and de-concentrating them, but as opportunities that provide a proper context for special type of social and economic activities. In this way, as Susan Fainstein (2010) mentioned, our cities will move towards a more equal and just living environment.
Appendix of the analysis
Neighborhood Analysis - Tarwewijk

Local Enterprises...

Zones

Networks

Building typology

Potentials
Type and spatial location of local businesses in Tarwewijk

Map number 48 shows the type and spatial location of the businesses in the neighborhood of Tarwewijk. These businesses could be categorized in the following groups:

- Chinese mini-market
- Second hand shop
- Broadcasting office
- Turkish Eat house
- Cafe-restaurant
- Telecom center
- Mini-market
- Fashion shop
- Grocery
- Lyca mobile
- Flowershop
- Beauty salon
- Pharmacy
- Coffeshop
- Hairdresser
- Car repair
- Massage
- Cafe

Degree of local businesses concentration in Tarwewijk

According to the map in front, there are different degrees of concentration of businesses in Tarwewijk. In the central area of the neighborhood in which several public spaces are located there is no businesses while it could be a good place for allocating community business because of the existence of semi-public spaces in this area. This will be considered in the design.
Local businesses and the street networks in Tarwewijk

In Tarwewijk there are two streets which have a higher degree of local business concentration; one of them is the edge street located in the eastern part of the neighborhood while the other is near the western edge (check map number 51). The most public inner street in Tarwewijk has a few local businesses but it has a good potential for being the place of temporary local business activities because the metro high line is passing through this neighborhood and the leftover space under it which is shown in the picture number? could be used for different temporary socio-economic activities. In addition to this the edge street which is shown in the map needs to be allocated to local businesses which could increase the vitality of this street.
Local businesses and the building typologies in Tarwewijk

There are different kinds of integration of building typologies and the local businesses in Tarwewijk. For example, there are some attached spaces to the dwellings for business activities as it is shown in the first picture. This is a simple and sufficient way of using the leftover spaces which could be done in the other parts of the neighborhood as well. Another type are the businesses which are located in the corner of a residential building and the other type which is shown in the third picture are the row shops which are located on the ground floor of the dwellings and in the case of Tarwewijk are located mainly in the edge streets of the neighborhood. These row shops increase the vitality and safety of the streets specially when there is an integration of different functions with various times of activity.
Neighborhood Analysis- Bloemhof

Local Enterprises... Zones Networks Building typology Potentials

Picture 88- Bloemhof, Google Images
Local businesses in Bloemhof

Map number 52 shows the type of the local businesses in Bloemhof which could be categorized in the following groups:

- Restaurant
- Cafe
- Grossery
- Car material shop
- Electronic shop
- Snack
- Beauty salon
- Photo-video lab
- Bakery
- Car repair
- Tele star
- Lidl
- Second hand shop
- Nightshop
- Baby gift shop
- Dirk
- Mobile shop

This neighborhood has a considerable number of local businesses which are more located in the edges. So in the case of this neighborhood the problem is not the shortage of local businesses but its more about the spatial distribution of them and as it is obvious from the map below, there are big areas without any economic or social activities which makes them mono-functional and non-vital. So it is necessary to intervene in these areas by adding different kind of socio-economic activities there.
As it has mentioned before, the edge streets of Bloemhof are the main concentration of local businesses in this neighborhood. A few number of inner streets are also occupied by local businesses as it has shown in the map number 55. The main weakness in this relation is the most public route in the neighborhood which has a length of about 1 kilometers with only a few number of shops or other socio-economic activities located in it. The main socio-economic spot in this street is Lidl. This route could be a potential area of intervention specially because of its good accessibility by public transport and the green linear space that exists in this street.

Another important factor about this street is that it is the in between route of the highly concentrated of immigrant blocks and highly concentrated of Dutch people dwellings, so it could be a catalyst for the social integration of local people.

Local businesses and the street networks in Bloemhof
Local businesses and the building typologies in Bloemhof

Like the other neighborhood which has explained before, there are different kind of integration of the buildings and local businesses like corner shops, row shops, ... in Bloemhof. A type of dwelling exist in this neighborhood which has a semi-private space in the middle of it which is the common space for the inhabitants of the residential block which could be a potential for special kind of socio-economic activities in the se blocks.

In addition to this, in the south part of the neighborhood which is the concentration of non-immigrant people in Bloemhof, there are several attached houses with semi-private spaces which could be considered as potential areas for increasing the social activities in the area.
Neighborhood Analysis- Afrikaanderwijk

Local Enterprises...

Picture 92- Bird eyeview of Afrikaanderwijk, Google Images
Type and spatial location of local businesses in Afrikaanderwijk

Map number 56 shows the type and spatial location of the businesses in the neighborhood of Afrikaanderwijk. These businesses could be categorized in the following groups:

- Jumbo
- Lidl
- Grocery
- Bakery
- Laundry
- Cafe
- Fashion shop
- Mini-market
- Restaurant
- Beauty salon
- Cloth shop
- Video shop
- Photography
- Sportshop
- Car repair
- Italian restaurant
- Telecom centre
- Shoe shop
- Turkish airline
- Grocery
- Bar
- Car repair
- Bikeshop

Degree of local businesses concentration in Afrikaanderwijk

According to the map in front, there are different degrees of business concentration in different areas of Afrikaanderwijk. The main economical cluster is located in the west side of the neighborhood (the darkest colour in the map number 57). The important issue in this relation is the weak integration of the local businesses and the big public space in the middle of this neighborhood. As it has been explained in the previous pages because of the potential typologies.
Local businesses and the street networks in Afrikaanderwijk

Map 58 - Degree of the integration of the routes in relation to the enterprises spread, By author according to space syntax analysis

Map 59 - Local businesses and street networks in Bloemhof, By Author

Picture 93 - Afrikaanderplein local market, http://architectureau.com
Neighborhood Analysis- Carnisse

Local Enterprises... Zones Networks Building typology Potentials

Picture 94- Carnisse, Googlemaps.com
Type and spatial location of local businesses in Carnisse

Map number 60 shows the type and spatial location of the businesses in the neighborhood of Carnisse. These businesses could be categorized in the following groups:

- Hairdresser
- Bakery
- Cafe-restaurant
- Kidsshop
- Sportshop
- Furniture repair
- Secondhandshop
- Auto material
- Ethnic mini market
- Grocery

In addition to these local businesses a big shopping mall, Zuidplein, is located in this neighborhood.

Degree of local businesses concentration in Carnisse

As it has shown in the map number 61, in the south western part of the neighborhood no local businesses exist and this part is the most monofunctional area of this neighborhood. Overall Carnisse has a well distribution of local businesses in comparison to the other three neighborhoods of study.
Local businesses and the street networks in Carnisse

Most of the well-integrated local routes of Carnisse are occupied by local enterprises but as it has been explained in the previous page this spatial dispersal is mainly concentrated in the northern half of this neighborhood. Even the most integrated streets in this neighborhood do not have any local businesses in their southern half.
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