FROM POST-WAR LIVING ENVIRONMENT TO CONTEMPORARY NEIGHBOURHOOD

The case of South Kolenkitbuurt in Bos en Lommer, Amsterdam

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Preface

This report is the final result of a two-month research work about an area, depressing at first glance but rather exciting after the first visits, the south Kolenkilbuurt. It is one of the most physically and socially degraded neighbourhoods in the Netherlands, located at south-western Bos en Lommer district in West Amsterdam. This research constitutes the first part of my Graduation Thesis.

The neighbourhood and its inhabitants, the experts from several sectors who shared their valuable experience and my group mates made this process a stimulating and pleasant experience.

I would like to thank my supervisors: Lidwine Spoormans and Wido J. Quist and for their guidance and assistance during the process and all the experts who shared their knowledge with our group.

Last but not least I would like to thank my partner Mary Kyprioti who helped me and supported me during the whole process.

Delft, 9 November 2012
Introduction

The aim of this report is to present the analysis of one of the Bos en Lommer neighbourhoods in West Amsterdam, the South Kolenkitbuurt. Special attention is given to the social factor that is considered as one of the most important parameters of the process. The area, the complex and the socio-economic state are analysed. The result of the analysis will lead the author to the formation of starting points used for the redesign of the complex and its context.

Bos en Lommer (formerly spelled as “Bosch” en Lommer) is one of the western garden cities of Amsterdam as envisioned by the urbanist Cornelis van Eesteren. The district was part of Amsterdam urban expansion, planned and realised between 1920 and 1950 with particular consideration on the green structure and clear definition of public, collective and private space. The buildings mostly consist of residential blocks the majority of which was meant for social housing and belong to the property of several housing corporations.

South Kolenkitbuurt, located at the south-eastern part of Bos en Lommer (fig. a), was one of the dwelling neighbourhoods built in the early 50’s. The family oriented character is profound even nowadays although the current physical condition doesn’t seem to prove the initial design intentions. A self supported neighbourhood combining residential, commercial and educational functions with lots of properly structured green space and provision of children playground. Nowadays, the image of the district is combined with the characterisation of “the worst neighbourhoods in the country” rising the need for research on what is behind such an impression and how can it be tackled. Apparently, except for the social issues and from the architectural expertise point of view, there are several problems in all three scales (urban, architectural and material). As a consequence, intervention is essential in order to promote the hidden values of the complex and turn it into a suitable and pleasant living vessel for its current residents.
The ambition of this studio is to gain an insight and overview of origin, history, past of interventions, the actual situation and the future possibilities of a variety of typologies in the existing housing stock. The students of the studio are expected to work on the transformation of housing stock and deal with architectural, cultural, historical, programmatic, economical and spatial issues. Areas and sites constructed in different periods in history will be studied. Analysis will be carried out using the different scales: the urban scale of city and landscape, the architectural scale of buildings and context and the technical aspects of structure, material and detail. The research results of this studio along with the needs of the people involved as well as contemporary and future themes will lead to the design of interventions on all scales (Spoormans, Quist, 2011).

The aim of the current project is to offer design solutions that will lead to the overall promotion of liveability in South Kolenkit neighbourhood, located at Bos en Lommer district in West Amsterdam (fig. b). The bad living conditions of the residents are mainly result of social and financial issues and secondarily of the degradation of the physical environment.

In my opinion, the physical development of an area is a very important step towards its general revitalization. However, the physical development on its own, does not ensure the solution of the deeper problems of the residents. Sometimes it is even used as a means of driving the low income residents away from their area, a tactic that does not solve but just transfers the social problems in another area. As the residents of South Kolenkitbuurt are one of the most important factors of the identity of the area, it is considered crucial for architects or urbanists to propose a physical development that will focus primarily on their needs.

In what follows a short insight is given of the way that this project intents to approach the aforementioned issues.

**Personal motivation**

In a time of global financial and political crisis architecture and urbanism practice should be re-evented in order to give accurate solutions to the current spatial problems. R-MIT offers its students tools in order to tackle today’s spatial challenges.

In my opinion Restoring-Modifying-Intervening or Transforming the existing building stock is nowadays more relevant and necessary than ever. Apart from the appreciation of the building heritage, there is also another factor that promotes the architectural ways of R-MIT; In most European and North-American cities there is no longer the financial window for brand new projects and large scale demolitions.

Being from Greece, a European country with long history and rich, noteworthy building heritage dating from the ancient times until today, I have learned to appreciate the built stock which represents it. In my country, although conservation is considered essential, the later building heritage is still not given proper treatment and attention. Having the strong belief that the earlier buildings are equally interesting and important I would like to deal with a post war non-monumental case study in order to develop an intervention method and get familiar with the special characteristics of this building category. I hope that the methodology and the outcome of this thesis will help me enrich my experience as a future restoration architect.

What I also find stimulating, is the fact that this project is given a real dimension making it more interesting than the pure academic practice that is sometimes beyond reality. In particular, my interest lies in dwelling blocks firstly because I consider the dwelling as the cell of the city and therefore the most important building type and secondly, the dwelling blocks are the most diffused building type in Europe. Thus, it might be the case that principles of my proposal may also be applicable, with relevant alterations, for other residential post war blocks in the Netherlands or abroad.

Finally, the reason why I chose South Kolenkitbuurt out of several blocks in West Amsterdam is because of some special characteristics that this area features.

1. NEGATIVE REPUTATION. In 2009, the Minister of Housing, Eberhard van der Laan, referred to the neighbourhood as “the worst in my 40 problematic neighborhoods list”, mainly because of the poverty and general social conditions. This reputation, being valid until today, makes it rather challenging to examine, until what extent, architectural design might compensate for that.

2. CONTEXT. Kolenkitbuurt is located at a privileged spot in terms of future development: a mid 20th century district, 15min (by tram) away from the historic centre of Amsterdam and 8min (by train) from Schiphol airport, factors that offer wide range of possibilities for an interesting design.
Problem statement

The urban and dwelling development of Bos en Lommer district, at the time of its realisation, was aiming at attracting people in order to offer them better living conditions. Nowadays, the area has become dull and resembles in many spots an abandoned place, mainly because of separation between the different ethnic or social groups who reside it. In my opinion, social problems are more than eminent in the South Kolenkitbuurt. Such impression was formed after several visits to the site as well as extensive insight to relevant research material.

At first sight, outdoor space, once intended to be “ideal”, became unlovely and decaying. That is mainly because the population this development was meant for, has changed gradually and the built environment does not satisfy the needs of current society as was in the past. By looking thoroughly into the demands of people who currently reside in the neighbourhood is the key to create a suitable environment which will aim at satisfying their living needs. Apt design can stipulate the progress of social engagement, improve relation between neighbours and upgrade social structure.

Political, economic and social issues of the time the neighbourhood was created were radically different compared to the current situation. Bos en Lommer in general was designed for a society which had passed through severe difficulties, survived through wartimes and eventually started to build up their country with an inspiration and belief in a better future. It consisted mostly of native Dutch families. During time, the reality changed and immigrants from different countries flooded the area. They were mainly poor, less educated representatives of different ethnicities, with different cultural and religion backgrounds seeking for a better future. Soon, representatives of the same or different ethnical groups followed, resulting in creation of social groups with difficulty or questionable willing to engage in the existing social tissue (main reasons were language barrier, cultural differences with the natives etc.). At the same time native Dutch residents of relatively higher living standards left the neighbourhood being replaced by immigrants. Simultaneously, the built environment has been gradually deteriorating due to lack of maintenance by housing corporations and municipality. Today, South Kolenkitbuurt presents a morally and physically outdated image and except for future plans regarding extensive demolitions and rebuilts nothing seems promising in terms of interventions on the current built environment.

Finally, taking into consideration Eisenman’s phrase “I don’t think architecture is about solving human problems at all” (Eisenman, 2011), scope of the final design is to create such living conditions that will adapt more accurately to the needs of the residents and overall promote the liveability (Journal of Construction in Developing Countries, 2010) in the neighbourhood.

Research question

The main research question of the current design project is:

What interventions into the existing built environment of south Kolenkitbuurt would promote liveability in the neighbourhood.

During the study, further subquestions arise and need to be processed as intermediate steps towards the final goal. Some of the most profound are:

- How did the physical living environment of the neighbourhood evolve through the years.
- What kind of society did it serve.
- What kind of architectural proposals might encourage social engagement.
- To what extent the buildings “allow” for structural changes.
- In which way housing stock can be diversified in order to attract people of various living standards (income, interests etc).

The following diagrams provide with definitions of the research approach and used terms (fig. c).
Research methodology

The research methodology is based on thorough study of two complementary frameworks which aim at formulating the final design directions (fig. d).

The theoretical framework, being the first part of the analysis (and subject of P1), focuses on observations and bibliography research regarding the social and spatial dimensions of the area (Carmona, 2010: 77-110 / Gehl, 2010: 63-89). The notion of time is crucial parameter for this framework as it provides insight to the development of the area through history and possibly projects future trends. After data collection, value identification and assessment follows in order to draw the focus to the most important and valuable information which should influence the design.

The empirical framework is the next part of the analysis aiming at data collection through needs of users and involved stakeholders of the area under study. Residents and housing corporations will be primary sources of empirical data gathered through interviews (Macmillan, 2003: 192-193). An important part of this framework is the experience we have out of relevant and already realised case studies. Housing projects in areas with similar issues will facilitate the formation of design strategies based on brainstorming of previous researchers on relevant topics and performance of their final design product in everyday life of its users.

The research results of the aforementioned frameworks are summarised in a matrix which helps the general organization of the collected and evaluated material.

Fig. d. Research methodology schemes (author)
Societal relevance

Since the beginning of the 21st century the municipality of West Amsterdam, under the auspices of the Dutch State has been looking for ways to improve the residential quality and, in general, the quality of life of the western garden cities residents. The main goals of municipality’s future vision include the social mixing in the problematic districts along with their physical enhancement. In a few words, a social and physical balance between the city of Amsterdam and the later expansions to the west is attempted; wish that puts in the forefront the issues of districts like Bos en Lommer which generally have been gradually falling into despair.

Within this frame, the current research and design project intends to offer alternative suggestions for dealing with problems that not only have a physical dimension but also a social and financial one. Since the prevailing issue of the area is the social, the main focus of this project will be an anthropocentric development based on the needs of the present residents. However, someone could argue that the role of the architect has to do with the physical aspect leaving the social and financial aspects to other experts. In my view, the physical development of an area is a very important step towards its general enhancement. However, as stated in the previous pages the physical development on its own does not ensure the solution for the deeper problems of the residents.

As the inhabitants of Kolenkitbuurt are one of the most important factors of the identity of the area it is crucial to consider their financial and social issues. In this direction, the role of each architect or urbanist dealing with this area is to propose a physical development that will focus primarily on their needs. The current project is based on parameters that address social, financial and physical problems taking also into consideration the involved stakeholders’ demand. These parameters followed by the current social needs are addressed in the analysis which will constitute the base for the design.

Scientific relevance

The contribution of this project aims not only at regarding the case of South Kolenkitbuurt in Bos en Lommer but also to provide the relevant scientific community with a design toolbox that could be used in case studies with the same or at least similar characteristics, such as 50’s portal building blocks rented by immigrants and/or low social groups within a physically degraded district.

Of course, it cannot be neglected that, in practice, after the realisation of such project, significant amount of “testing” time is required in order to be proved successful or not. Nevertheless, the final products of the current project are expected to enrich the general debate about how and to what extent physical design may contribute or even stimulate the formation of livable (socially, financially and physically) residential districts.
## Work planning

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<td>Analysis of historical development</td>
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<td>Lectures by architects</td>
<td>Analysis on material &amp; detailing</td>
<td>Lectures by experts about sustainability &amp; building physics</td>
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<td>Lectures by architects who realised projects in the area under research</td>
<td>Analysis of buildings</td>
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<td>Discussion of facade drawings</td>
<td>Preparation of material for presentation</td>
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<td>Analysis of material &amp; detailing of buildings</td>
<td>Preparation of material for presentation</td>
<td>Analysis of feedback on draft report</td>
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<td>Visit Kolenkitbuurt apartment interior</td>
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<td>Sketch first ideas on building level</td>
<td>Elaborate masterplan together with sustainability supervisor</td>
<td>Produce clear schemes and diagrams explaining the general concept and personal position</td>
<td>Elaborate masterplan regarding urban and building space and functions</td>
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<td>Interview sustainability supervisor</td>
<td>Elaborate masterplan regarding urban and building space and functions</td>
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**Note:** The table above outlines the work planning for different weeks, detailing the tasks and activities to be completed in each phase of the project. Each week's tasks are aligned with the theoretical framework analysis, research theme definition, preliminary research, and report phases. The detailed activities include studio introductions, interviews, and meetings with various stakeholders, as well as design developments at various levels such as masterplan, building level, and detailing. The final weeks focus on preparing final reports and presentations.
Urban level analysis

Development in history

Amsterdam has a very long history of planning. Its topographical circumstances have meant that the government has always played a role in land clearance and allocation (fig. 1.1). Since construction requires drainage and land fill, which must be conducted on a larger scale than is feasible for individual developers and is quite expensive, the government has, for much of the city’s history, carried out land preparation and thereby determined which areas would be developed. As more residential space was needed, extensions to the built-up portions of the city were mapped and carried out according to detailed plans. In 1917 the city council approved an elaborate scheme for a southern extension under the direction of the architect H.P. Berlage and in 1935 it endorsed the General Expansion Plan (GEP) (APPD, 2003). The GEP, which required that new developments include ample provision for public space and social housing, continued to guide development well into the 1950s. While subsequently supplanted, its underlying precepts regarding comprehensive planning, environmental protection, public space, clearly demarcated boundaries to development and low-cost housing remained in effect much longer (Faludi and van der Valk, 1994).

The initial emphasis of postwar planning was on housing provision. Although Amsterdam had not sustained extensive war damage, it suffered from a severe housing shortage and much of what existed was in poor shape. During the occupation operations much of the residential stock was destroyed while the construction of new homes during the same period almost completely stopped. Thousands of families had no property in their ownership and had to accommodate in shelter-like dwellings that remained in the city. Under these circumstances it is not surprising that the housing shortage was considered as a serious public enemy.

The Socialist-dominated government enforced strict rent control and, using funds from the national government, embarked on a major program of housing production on newly annexed territory. Ninety percent of new residential construction between 1945 and 1985 was for publicly assisted rental dwellings (Deben et al. 2004; Terhorst and van de Ven 1997). Because expansion of the city resulted directly from government investment in housing construction, it could be carried out strictly according to plan. The original planning model was of a city with clear edges, limited growth along corridors, functional segregation of uses, and congestion relieved through the building of new towns outside the city boundary (APPD 2003).
The General Extension Plan (in Dutch “AUP”) of Amsterdam, which was established in 1934, proposed expansion towards west and south of the old city. The plan was lead by the urbanist and later head of the Department of Urban Development of Amsterdam, Cornelis van Eesteren. Soon, Van Eesteren became a key figure within the CIAM and the Modern Movement, supporting the clear separation of functions. Living, working, leisure and traffic function were arranged with surgical precision in the expansion plan, so that to serve in the best possible manner the provision of light, air and space throughout the entire area (Velde van der, 1968).

In practice, the plan was aiming at a solution to the large housing shortage; in fifteen years, more than 15,000 homes were built. In idealistic sense however, it was above all an alternative solution to the chaotic, unplanned and unhygienic traditional city. What proved special in the expansion plan, was van Eesteren’s long-term vision based on scientific studies. He worked with planning horizon the year 2000 based on existing large scale surveys regarding population (Amsterdam until 2000 would grow up to 1,083,000 inhabitants) and estimates on the development of industry, ports and traffic (Velde van der, 1968).

Bos en Lommer was one of the first districts which along with Slotervaart, Slotermeer and Geuzenveld consisted the garden cities of western expansion according to the aforementioned plan. Those areas were mainly designed as residential in order to meet the urgent demands for housing after the WWII. Although the plan was prepared before the war (1935), the crisis in the thirties did not facilitate the realization of the “ideal” living environment. The municipality proceeded in revisions of the initial plan nibbling several parts, until it became too restrictive for the architects whose criticism focused on the tight margins within which they had to work. The high land prices forced the designers to far-reaching concessions in order to reach affordable rent prices. The notions of “fast and cheap” construction were prevailing. The plan envisaged the construction of 9,800 homes for 35,000 residents, 90 percent of workers and 10 percent suburban homes (Teijmant, 2008).

Nevertheless, the contemporary ideas and quality which were finally implemented into the plan cannot be foreseen especially considering the financial situation of that period. Bos and Lommer provided the opportunity for decent housing especially for big families who couldn’t lead their lives in the small and often unhealthy residential environment in the old city centre. Modern, spacious and fully equipped appartments were offered at rent prices subsidized by the state.

Despite the general uniformity and monotonous stamp-like masterplan (Fig. 1.3) there was an attempt, rather subtle though, for unique planning signatures in each Bos en Lommer neighbourhood. Most blocks have almost the same dimensions - although one block is slightly longer than the other - and all the streets and courtyards have the same width.
Existing theoretical background

The urban structure of Bos en Lommer can be considered as transition between the ideas one of the most famous urban planners of past century Sir Ebenezer Howard and the concept of General Expansion Plan of Amsterdam. According to Howard, the solution to overcrowded and poor living conditions in modern industrial towns, was to produce new communities featuring a more ‘joyous union’ of town and countryside. The goal of the garden city was to combine the attractions of town life with access to nature and a healthier lifestyle (Howard, 2010). Being among the most prevailing urban concepts of its time, influenced numerous later city expansions such as the “Expansion Plan of Amsterdam”.

As the original idea of the ‘Garden City’ was to create almost self-sufficient small cities, away from the existing big city, it would be quite safe to claim that Bos en Lommer design has more relations with another Howard’s concept, the ‘Satellite City’, developed within the ‘Garden City’ idea. As the ‘Satellite Cities’ in theory were satellites of the central city core, the historical Amsterdam performed like such center and Bos en Lommer, Slotervaart and Slotermeer as some of its western satellites.

“Howard’s ideas (those of Sir Ebenezer Howard as proposed in “Garden Cities of Tomorrow”) have laid the foundation for a new cycle in urban civilization: one in which the means of life will be subservient to the purpose of living and in which the pattern needed for biological survival and economic efficiency will likewise lead to social and personal fulfillment” (Simonds, 1994).

Garden City concept was mainly a reaction to overcrowded, noisy, polluted, cities of the industrialization epoch. Population increase in major cities, erection of factories and fabrics within the urban environment downgraded living quality in many cities. Howard elaborated new design, which served not only the creation of small urban settlements with better living qualities but also gave relieving opportunities to big cities. In his book, Howard included some schematic drawings to communicate his concept clearly; “The Three Magnets” (Fig. 1.5a) shows the tension of the urban metropolis. Howard enumerates most specific features of the city and countryside with their positive as well as negative sides. Then he offers the place where all good points of both structures may be gathered. The Garden City performs as such place, combining qualities of city and countryside.

In the concept of satellite garden city, Howard explains the essence of garden cities in relation with the central city. In the current case, with Amsterdam being the central city, Bos en Lommer performs as the garden city, though with a significant difference; Bos en Lommer is much more integrated in Amsterdam urban structure as the boundary between them is quite diffused. The latter may explain the reason why Bos en Lommer should be rather perceived as a satellite city (Fig. 1.5b).
The Kolenkitbuurt

The Kolenkitbuurt lies west of the A10 ring road and is bounded by the ring rail line, the Erasmusgracht and Haarlemmerweg. The district, built in the early 50’s, consists of three neighbourhoods: the southern, between the Erasmusgracht and the Bos and Lommerweg, the middle (between the Bos en Lommerweg and Wiltzanghlaan) and the one northern of the Wiltzanghlaan (fig. 1.6). The study area where this research is about, lies in the southern part and refers to the Ernest Staesplein neighbourhood.

The district inherited its name from the Resurrection church at the corner of Bos en Lommerweg and A10 as it resembles a coal bucket (in dutch, “kolenkit”). It was built between 1955-1958 and since then it is the most distinctive icon of the area. Its character is strengthened even further due to its function as a community centre for the area, offering space for leisure and cultural activities on the south-eastern ground floor. The Ernest Staesplein neighbourhood, being the main study area for the current research, was the result of extensive experimentation on masterplanning as well as building heights (fig. 1.8). Though, what was finally realized (fig. 1.9) has little in common even with the last experiment which eventually formulated the masterplan. Apparently, as stated before, the realized neighbourhood was the result of extensive concessions to the final masterplan within the frame of general financial crisis after the WWII. As was finally built, consisted of eight pairs of linear building blocks housing 272 dwellings and 4 shops.

Nowadays the western 2 pairs are completely replaced by new building volumes at the same plot boundaries of the old. The rest of the building stock hasn’t undergone any significant interventions since 1950. In 2000 was the beginning of regeneration period which involved planning for general neighbourhood renewal. The plans, which until today comprise part of the future vision for the area, suggest extensive demolitions and new building development in an effort to “connect” south Kolenkitbuurt with the middle part above Bos en Lommerweg avenue.
South Kolenkitbuurt yesterday & today

South Kolenkitbuurt has always been performing as a living ground for “the many”. It was a lively neighbourhood (fig. 1.10), an exceptional childhood scenery, carrier of nostalgic memories. What contributed to this special character, except for the urban design with the abundant free space of Staess square (fig. 1.11) and the beautiful gardens between the buildings, was the coherence of its almost purely Dutch society (Teijmant, 2008).

Nowadays, the social isolation, due to ethnic mixture, hinders or even prevents coherence. In addition to that, later interventions on the square, fragmented the space which nowadays, combined with the social situation, does not perform successfully as meeting platform for its users. The lively character of the area gave its place to a negative image and reputation, making it an anonymous building-stripe district (fig. 1.12).
Bos en Lommer accessibility

Bos en Lommer is accessible by all means of public transport and presents well distribution of main traffic roads without significantly problematic junctions (fig. 2.1). South Kolenkitbuurt (yellow area on the maps) can be served by the Bos en Lommerweg stops and the closest major station is Sloterdijk. The area stands by the national A10 road and is directly connected with Amsterdam centre and Schiphol airport. Eventually, its favourable location, combined with appropriate interventions, might support significant potential for development in the future.
Comparing built space with green areas in Bos en Lommer (fig. 2.2), prevailing of the latter becomes rather clear. The abundance of public and communal green spaces is until nowadays a great value of the area and should be enforced even further. Almost the same proportion of green against built space is seen on neighbourhood level as well. Although the use and accessibility of the building gardens didn’t change from the past, in many cases their “hidden behind bushes” character gives the impression of abandoned areas and the lack of specific design diminishes their interest. On Staess square (fig. 2.3), public greenery looks quite sporadic while, along the streets, trees and garden organization seems as if it just fills voids.

As green is main parameter of the areas’ character, it needs strengthening in order to become primary means of space organization. Of high importance for the neighbourhood, is also the Erasmusgracht water canal at the south. Although currently a neglected “back side”, its potential for development promises a high quality pleasant space for the neighbourhood.
The Ernest Staes square

The design intention of Staes square was to perform as meeting place for neighbours and playground for children. During the first 10 years of its realisation there was no building on the square. Since 1965 though, an elementary school building was erected in the centre (Teijmant, 2008). Despite the apparent purpose of the school building, from the planning point of view, it separated the square and due to its layout, created “dead corners” contributing to the fragmentation of the public space (fig. 2.4, pic.2,5). Those space left overs can be rather described as “non spaces” (Avermaete, 2010) in the sense of not being able to serve their urban purpose, which, judging from the benches, apparently is to bring people together.

Moreover, sporadic greenery, either in the form of tree rows or separating fence bushes, between square and communal gardens doesn’t facilitate intimacy. Therefore, these green spaces, as a result of either unsuccessful design or randomness, do not present attractiveness or support willing for social gathering around them (fig. 2.4, pic.4,7). Simultaneously, the essential playgrounds with the form of semi closed football court and climbing steel structure (fig. 2.4, pic.6,8) disrupt the western part of the square restricting pedestrian circulation even further.

What should mainly be taken into consideration is that Staes square, as meant for common meeting place for people mainly of the surrounding dwelling blocks, it’s important to perform as connective chainring among them and intimate platform for social interaction. Towards this direction, the current communal functions of the former elementary school building, should be maintained and strengthened though in a new, functionally dedicated building cell.
The study area features a significant variety of recently accomplished building projects giving it a clearly progressive character and expressing an eager for renewal and development (fig. 2.5). Diversity of volume sizes, techniques, materials and compositions, create an environment with interesting and attractive buildings, when seen individually but, in total, it gives an impression of architectural polyphony. One can probably claim that, during the last years, south Kolenkit neighbourhood has been performing as a ground for experimentation on coexistence of various architectural expressions. It seems as if every architect cares more about signing in the area considering less about what other signatures might also have been there. Nevertheless, a more thorough glance might reveal some common patterns among different buildings in the area, bringing up subtle congruence. Such congruence is noticed between the eastern buildings (fig. 2.6, 6) and the study area, since the new development “borrows” architectural elements from the existing old context, using them though, in order to create a unique expression.

Except for the new developments in the area, either with the form of renovation of existing buildings or total replacement of pre-existing, there is a significant percentage of old buildings which haven’t undergone any noteworthy alteration. In this category, belong the Kolenkit church (1), the Bostblok (8) and the buildings under current project (fig. 2.5, marked with grey). Architectural projects involving these buildings, in my opinion, will have to face a “triple” challenge: Follow the progressive development stream of the area, perform as means of congruence for their context, maintain their architectural expression as the only remaining chance to establish link with the past in the area.
The neighbourhood dwelling blocks are set as pair units with a communal garden while 5 pairs around a square comprise the total masterplan of the study area (fig. 2.7). The neighbourhood is surrounded from all sides by buildings creating an enclosure, “protected” from traffic noise, safe for children playgrounds. A major change in the last years, was the replacement of the two western building pairs with new (marked red in fig. 2.7), introducing, on the one hand, new qualities in the area but on the other, creating “quality gap” with the existing (fig. 2.8). The new “language” introduced by the recent, eastern building project, involves implementation of ground floor living spaces facing the street with access to the entire garden space at the back side. These new gardens exhibit elaborate design contrary to those among the existing blocks which feature greenery randomness. The encroachment zone is also important feature of the new buildings as an effort to achieve smoother relation among interior and exterior space. Moreover, although the new volumes are congruent (regarding the general dimensions) to those existing previously, the new facades’ elaborate detailing, adds extra quality to the context and strengthens contrast with the existing. However, the entrances of the new buildings, as being more “retreated”, lost their clear expression, important characteristic of the existing blocks as a distinctive means for the children to “recognize” their apartment entrance. Important to mention also, is the fact that although the new project gardens are designed thoroughly, their space unification proved quite unsuccessful as it seems that users prefer more clearly separated spaces.
The renovation projects during the last years in the area, as stated before, have introduced, among others, problematic relations with the existing buildings (fig. 2.9 & 2.10). These weaknesses are mainly due to apparent differences in architectural style and functional management of the space in-between.

In the case of Borstblok, the lack of communication with the Staes neighbourhood (grey on fig. 2.9) is an important issue, due to its position, performing as “entrance & exit” to and from Bos en Lommerweg. Although at the moment the feeling of “back side” is prevailing, Borstblok is important border for ensuring the enclosed character of Staes neighbourhood, serving one of its purposes, that of safe from traffic, children playground.

Kolenkit church, on the other hand, was created as a free standing symbol in the area with not any serious intention for integration with its direct context. Moreover, its function as general communal centre implies connection with the wider area and not exclusively with the particular neighbourhood.

Foyer and Leeuw van Vlaanderen buildings, on the east side of the area, although congruent with their context in terms of volume proportions, introduce the characteristic of introversion. Contrary to their contextual buildings, their facades do not feature any balcony. Leeuw van Vlaanderen building, result of extensive renovation the last years, incorporates ground floor encroachment zone, “opening” itself to the street while, the building at the opposite side, “opens” itself to the street on higher levels, through balconies.

The Erasmusgracht canal border, consists the only unblocked viewing side of the neighbourhood. Although quite distant, the new building blocks on the opposite bank of the canal, comprise contemporary icons which, combined with the decostructive design canal bridge, complete a contradictory image with the existing old blocks of south Kolenkit.

In general, the surrounding context and its relation with the Staes building blocks seems quite challenging and demanding in order for the new project to position itself and create decent architectural dialogue.
As stated before, south Kolenkit neighbourhood does not face any car road except for the cul de sacs which make the area accessible by car. This fact contributes a lot to the quiet and car safe, enclosed living environment, main parameter of the children playground-oriented design. Cars may approach the neighbourhood from Bos en Lommerveg avenue through 2 entrances by the Borstblok building (fig. 2.11). Parking space is provided along the cul de sacs within slots dedicated for that purpose, oriented parallel or perpendicular to the pavements. Around the study area buildings (fig. 2.11 -marked with grey), there are 230 available parking slots shared among the residents of 425 apartments. Although most of the slots have been added through the years, as architects initially designed upon the ratio of 1 car per 22 apartments (Teijmant, 2008), there is no parking space insufficiency in the neighbourhood. Though, for the future design, it is important to investigate alternative parking strategies as, currently, the slots interfere and interrupt the building-street relation. Also, the parking capacity of the neighbourhood may need to increase in order to serve additional residents in the future.
An interesting issue, mostly related to the urban and social character of the neighbourhood, is the need for expression and identification. The society which firstly resided Kolenkit, was much different than nowadays. At the same time, the quality of urban space and building detail, either because it was a new development for its time or due to its innovative character, providing abundant space both on urban and building scale, gave the neighbourhood exceptional character. These identifying features attracted local population, mostly families, who found it very suitable area to live and raise their children. The innovative character was clearly expressed through design quality, although the latter was restricted to basics. However, 20 years after its creation, the neighbourhood started experiencing significant social changes which, through time, reflected on the urban and building fabric. As the new residents were immigrants of lower social and income strata than the pre-existing inhabitants, stimulated a different social image of the neighbourhood drawing less attention and interest compared to the past. Within this frame, local people started leaving the area giving their place to the foreign tenants who, nowadays, have almost exclusively resided the south Kolenkitbuurt dwellings.

As neighbourhood started acquiring a reputation of poverty, mainly derived from the financial status of its inhabitants, it gradually fell into disregard. Within this framework, the area, not only lost its authentic character and special identity but also provided grips for negative characterisation, maybe exaggerating though, by mass media, as “the worst neighbourhood” of Netherlands.

The decorative patterns presented in fig. 2.12, can be seen on the building facades towards Erasmusgracht canal. This minimum effort of identification empowerment, done by Far West housing corporation, is an attempt to declare the neighbourhood presence to the adjacent area, through the only “open” side of the neighbourhood, the south. Maybe it is important to state that all surrounding neighbourhoods have been recently either rebuilt or undergone extensive transformations which, in general, created a need for “repelling inferiority”. Eventually, this decorative effort expresses the eager for renewal and development of new identity in the neighbourhood which, among others, should be main goal of the design intervention in order to blow new air of quality and attractiveness.
Future vision

During the last years, there has been a lot of planning regarding future development of South Kolenkitbuurt. In the name of renewal and social problems tackling though, the main vision, concerns extensive demolitions and rebuilding, in order for the area to acquire completely new image and character. Nevertheless, the recent financial “crisis” delays such projects and decision making processes, leaving the area under uncertainty. As stated before, those plans come into contradiction with the willing of current residents to maintain the current character of the neighbourhood and upgrade its existing built environment, as they feel rather attached to it.

At the end of November 2004 it was announced that Minister Dekker of VROM (Ministry of Housing, Spatial Planning and the Environment) is to contribute 2.51 million euros to the regeneration of Kolenkitbuurt in West Amsterdam. Over the next ten years, this neighbourhood was to be radically revitalized. To this end, in mid 2003 the district council, the city council and two development companies laid down an overall plan and in June 2004 a start was made on the first redevelopment activities. The planners were seeking to create a more varied housing stock in order to encourage those residents who do manage to improve their economic situation to stay. A greater diversity of dwelling types could also attract new residents to the neighbourhood and so lead to a richer social and ethnic mix (www.arcam.nl).

Since the overall plan was laid down in 2003, detailed schemes have been drawn up for a number of sub-areas (fig. 2.13). The scheme for South Kolenkitbuurt is intended to result in “pleasant living on leafy avenues”, as the planners themselves describe it. The existing north-south streets form the basis for these avenues which connect south with the northern part above Bos en Lommerweg. They are to be redeveloped and laid out as areas in which to linger. The plan provides for an open and inviting street facade with front doors on the street. On either side of the new avenues, a transitional zone is to be created between the public street and the private domain of the dwellings. The development along the avenues will be in the form of garden blocks. These will be closed off from the street by fencing so that an open spatial effect is combined with easy management. Apartments, town dwellings and ‘up-down’ dwellings, in various price ranges, are to be built in the new blocks. On the canal Erasmusgracht, the head elevations of the blocks will be given a special treatment. The dwellings here will be emphatically orientated to the canal. A new informal pathway is to be created as a pendant to the north-south avenues. This pathway will link the avenues and various squares and courtyards. For children, there will be abundant space in which to play on the wide pavements and in some of the courtyards. Parking space will be created in the street and in underground garages (www.arcam.nl).

As also mentioned before, those plans intend to tackle the social issues by “erasing” the area and building again from scratch. These measures might solve the issue for the specific area but in fact they transfer it to another. Designing for the current residents and aim at attracting also new, through interventions on the existing built environment will be the purpose of the current project, as an effort to diffuse the current negative reputation and create a new image for South Kolenkitbuurt.
Building level analysis

**Development in history**

The dwelling blocks under study in south Kolenkit neighbourhood, designed by the architects C. Keesman and J. Bot (fig. 3.1), were completed in 1952. The design was realised upon strict regulations favouring standardized blocks and leaving little room for the architects to implement their ideas about the “ideal” home (Teijmant, 2008). The residential buildings consist of 203 three-room and 69 five-room apartments of 50 and 70 sq. m. respectively and were mainly meant for families. The elementary school in the centre of Ernest Stoes square was built in 1961 (Velde van der, 1968) (fig. 3.4).

The plans were based on the principle of “space, air and light” and that at least half of the appartments had to be suitable for families with minimum four children. It was assumed that boys and girls could share the same room until their tenth year of age. As one of the fist neighbourhood inhabitants states, people who moved there considered their appartments as “palaces” compared to their previous dwellings, with “unprecedented wealth” the fact that they had their own kitchen and bathroom (Teijmant, 2008) (fig. 3.5).

Despite the uniformity of building layouts there was an attempt by architects to give their own design signature although this was expressed in a rather subtle way: slight differenciation in longitudinal buildings dimensions. Insignificant differences can also be recognized in specific building elements (i.e. entrances). The architectural language borrows vocabulary from the school of Amsterdam and modern movement. Despite the rational building concept, the architects did not implement exclusively the radical functional principles of the Modern Movement, because this would lead to total disappearance of the “typical Dutch character” of the buildings (Teijmant, 2008) (fig. 3.3).

The five storey buildings were erected in the traditional way involving scaffolding and mold assembling, in situ concrete pouring and brick wall building (fig. 3.2). At that time, construction materials were scarce and therefore expensive, increasing the construction cost almost by three times compared to that before the war (Teijmant, 2008).
Floorplan typologies

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- 2 floor corner 5 room apartment A
- 2 floor corner 5 room apartment B
- 2 floor garden 5 room apartment A
- 2 floor garden 5 room apartment B
- 2 floor garden 5 room apartment C
- 2 floor corner 5 room apartment D
- 2 floor corner 5 room apartment E
- single floor corner 3 room apartment A
- single floor corner 3 room apartment B
- single floor corner 3 room apartment C
- single floor corner 3 room apartment D
- single floor 3 room apartment A
- single floor 3 room apartment B
- storage space A
- storage space B
- storage space C
- storage space D
- shop storage A
- shop storage B
- shop storage C
- 2 floor shop A
- 2 floor shop B
- 2 floor shop C
- single floor public building
- garden

Fig. 3.6. Floorplan typologies (author)
Facade elements

The building facades can be generally described as repetitive and "dull" mainly due to the strict and identical units which comprise them (fig. 3.7). The repetition is only "broken" at the corner parts which in most of the cases are slightly wider and present different floorplan layout which therefore reflects, although subtly, on the facade opening organization. These parts, in case of Q2, P2, P1, O2 and O1 buildings also express the shops via large shopping windows. The building storage spaces are identified through small lighting and ventilation row of windows in between the entrance doors. Above the ground floor and in-between the corner parts, the facade units are identically same giving a quite "dull" impression as they are also combined with poor detailing (see next pages). The small building facades though, have no symmetry while in total, present much higher diversification in opening organization. Though, comparison among same orientation small facades, things become again identical (i.e. north facades of M2 and Q1 buildings).

Concluding from the above, a possible design challenge would be to experiment on different ways of apartment expressions on the facade, giving special character and identity on both building and urban scale of the neighbourhood.
As stated before, the main apartment typologies are restricted to 3 and 5 room dwellings of 50 and 70 m² respectively. Except for living spaces, 4 of the building blocks contain shops and half of the total ground floor space is dedicated to storage. A more thorough investigation on the floorplan drawings though, makes clear that these basic space types present significant alterations - sub-typologies. The way these sub-typologies are distributed, provide interesting repetition disruptions both in horizontal and vertical organization (fig. 3.8). All the buildings feature basement storage space along the entire ground floor at the side facing the street while the other side is dedicated to the bedrooms of the double floor 5 room appartments. The last three storeys provide 3 room appartments. Main differentiation is noticed at the building corners, most of which are shared among double face appartments of 1 and 2 storeys while in Q2, P2, P1, O2 and O1 buildings the first 2 storeys of the corner facing north-east is dedicated to shop space. Except for the corner units that are slightly wider, all the others, which comprise the total building lengths, are of identical width. Of the same width are all the residential blocks as well.

What is important to state, is that the sub-typological distribution is not clearly expressed on the building facades, fact which gives interesting design opportunities of braking the monotonous unit repetition (see next page) and give unique character both to the expressed appartments and the building in total.

Fig. 3.8. Vertical typology organization (author)
Entrances & staircases

The building entrances, apart from their apparent function, perform as defining architectural elements. Firstly, because their, even subtle, ornamentation expresses the presence of “school of Amsterdam” architecture (see next pages) and secondly, due to the fact that architects wanted them to be distinctive among the children, so that they can recognize which is the entrance of their apartment (Teijmant, 2008). Every entrance of the long facades provides access to 8 appartments while at the small facades, they are shared only by 3 (fig. 3.9).

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- Entranesc
- Staircases

Fig. 3.9. Entrances & staircases (author)
Spatial organisation

The buildings belong to the portal typology and their layouts are formulated upon a strict grid of 14m long repetitive units (fig. 3.10). Within this unit, every storey consists of 2 symmetrical apartments of 7m width each. The total width of the buildings is 9.30m. The ground floor is separated in two longitudinal parts, one of which houses the storage spaces. The first two storeys provide double floor 5 room apartments of 70m² each, while the last 3 storeys are dedicated to 3 room apartments of 50m² each. In all buildings, living rooms face the garden while bedrooms are located along the street side. Every storey is 3m high except for the ground floor being 2.5m. The corner units present different layout as the first two storeys are dedicated to shop with its storage space. The entrance for the corner apartments above the shop, is located at the small facade leading to different apartment organisation. Although apartment sizes seemed enough and rather functional for the people who firstly resided them, today they need extensive adaptations to the modern living standards. Diversification is quite important regarding floorplan design in order to become suitable for more diversified social statuses and properly meet the demands of current residents.
Important issue regarding the architectural image presented by south Kolenkit buildings, is the great percentage of the preserved authenticity. Although the buildings are not listed monuments, have significant details which express the “shaking hands” architecture between the school of Amsterdam and Modern Movement. The total image is comprised by elements which purpose is reduced to their basic function, without any further ornamentation, except for particular parts like shop windows and some apartment entrances (fig. 3.11). What is predominant on the facades, is the amount of glazing surface. The large and multiple windows prove the design intention of the architects to provide the apartments with abundant natural light. At this point, it is worth it to mention that past intervention(s) involved replacement of the original wooden window and door frames with new plastic, achieving more airtight interior spaces but also providing natural ventilation through grills. Nevertheless, this was the only noteworthy alteration to the authentic building structures.

The multiple rows of balconies are also characteristic. As the balcony walls are more retreated compared to the rest of the facade, allow for interesting shadows which “break” the monotony of repetition. Distinctive detail also, are the hooks hanging from the roof overhang, above the balconies, distinctive element within the Dutch building context.

Finally, it is important to state that future design should take into consideration and strengthen the aforementioned characteristics, as they, not only contribute to the image of the neighbourhood but also constitute expression of the local architecture of the 50’s.
The apartments interiors speak volumes of the high quality standards the architects managed to reach for the time the buildings were realised especially when taking into account the financial restrictions within which they had to design. According to first residents testimonies (Teijmannant, 2008), they were astonished by the quality, luminosity and space, especially when compared to their previous homes. This quality level is perceivable until today despite the physical, although not extensive, degradation and in most of the cases outdated materiality. The spaces feature great degree of authenticity except for minor technical interventions done by the housing corporation.

Although interiors present significant coziness, the need for organizational re-arrangement is apparent in order to adapt the dwellings to modern living standards and serve various different tenant target groups.

- The door gave access to the room formerly used as laundry
- The fireplace replaced by gas heating system
- The original wooden window frames replaced by plastic with ventilation grill
- WC tiling and furniture

Fig. 3.12. Typical corner apartment floorplan and interior images (author)
Environmental aspects

From the environmental point of view, the building orientation (15° inclination against north-south axis) is advantageous when it comes to benefit from natural light. Also, this orientation offers protection from extensive exposure to north, thus facilitates insulation strategies. All the interior spaces share the same amount of sun light exposure though during different time of day and through different rooms. In the past, ventilation was achieved through the wooden frames of openings while nowadays, after technical renovations, the new plastic frames feature ventilation grills.

After a rough assessment, processed by means of environmental computer software (IES-Integrated Environmental Solutions), it was possible to get a general overview of the area’s climatic conditions that will influence sustainable strategy of design proposal towards maximisation of living comfort and minimisation of cost. In general, the area’s climate profile can be summarised as follows:

- Humid-temperate climate with no dry periods
- Warm summer and mild winters with heavy precipitation
- Winter prevailing winds are typically north while summer winds typically south.
- General year round winds typically western.

Fig. 3.13. Environmental characteristics (author)
The neighbourhood buildings were erected according to traditional construction technique (Fig. 4.1). Foundation structure involves pillars upon which the concrete basement floor is settled. The ground floor features concrete primary structure with columns bearing beams and brick masonry infills. Upon this structure, half of the first floor is constructed by concrete slabs while the other half features wooden floor. This storey does not present concrete primary structure but bearing brick walls, as is the case for all the above floors which also feature wooden floors and brick partition walls. The roof is timber structure covered by asphalt membrane and grounded gravel. Except for the ground floor, concrete has also been used for the balconies and bathroom slabs as well as the central staircases. All these, comprise prefabricated elements. Although the entire structure is quite rigid, offers satisfactory level of changeability, due to the identically repetitive units, and could support diversified design adaptations.
Materials & Detailing

In general, building detailing presents significant simplicity which, apparently, facilitated fast and cheap construction. Eventhough it may be questionable at what extent structure met the living standards even at the time it was realised, according to old residents' testimonies must have performed much better than most of the older dwellings of its time.

The choice of materials adds a lot to the architectural character of the building. Brick masonry combined with wooden structural details such as window and door frames as well as prefabricated balcony slabs formulate the quite elaborate total image, compensating rather successfully for the general cheapness of the entire dwelling project (fig. 4.2).

Nowadays, the structure bearing capacity should be investigated in order to reveal possibilities for extensions or additions which will adapt buildings to contemporary living standards and demands. Though, the character expressed by the existing materialisation is important to be maintained in order to ensure connection with the past.

New plastic window frame with ventilation grill

New plastic door frame with ventilation grill
Comparing the initial drawings (Fig. 4.3, as designed) of south Kolenkitbuurt building blocks with what is maintained today (Fig. 4.3, as is), one can notice slight differences. These are mainly concentrated on the window and door frames where plastic replaced wood and gave the buildings a poorer image. The general differentiation in expression between the two old facades, is due to the fact that the designs are products of two different architects (Fig. 4.3).

The level of design elaboration and detail, featured by the new project buildings as a contemporary expression realised by combination of new and traditional materials, create significant difference with the old blocks. This difference is justified mainly by material quality and design of details though, not because the old buildings lack elaborate details but due to the proportionally cheaper construction and probably restricted material and technique availability when compared with the new.

Nowadays, the evolution in construction sector, allows for cheap and high quality materials, the combined use of which, can facilitate general upgrade of the old building blocks in various ways. The proper choice and use though comprise crucial decisions when the preservation of the original building character matters. The latter belongs within the scope of the current project.
Socio-economic aspects

“Society produces its buildings, and the buildings, although not producing society, help to maintain many of its social forms.” (King, A., 1980)

Taking the above statement into consideration, it is of high importance to acquire a thorough insight into the social conditions before any architectural design proposal to a specific area. Understanding the social factors which are linked to the plot, is a cornerstone to the decision-making process. Users should be taken seriously into account by any architect or planner in order for the latter to achieve successful adaptation of their design proposal into the social context.

Bos en Lommer was a garden district meant for people seeking for better living conditions compared to what they had been experiencing by the time they resided it. Mainly Dutch families moved to the area which featured spacious and sunlit living space surrounded by greenery and large playgrounds for the children, away from their previous, smaller and “old fashioned” houses in the centre of Amsterdam.

Kolenkit neighbourhood was resided in the early 50’s by homogenous Dutch population which in the 70’s gradually started mixing with large immigrant families. For the latter, the space-price ratio proved very convenient. Between 1975 and 1985, the composition of population changed dramatically; the 10% of immigrant households in 1975 became 85% in 1985. Up until nowadays this ratio has not changed significantly. Despite the fact that after the arrival of the first foreigners in the 80’s, the social situation did not change radically, as Dutch population in the area was already used to live with some Indian, though, during the next years, native people were gradually replaced by immigrants. Due to this fact, possibilities of blending between natives and foreigners radically diminished while chances for integration to the Dutch society almost disappeared. The population identity of the neighbourhood became completely different, favouring the poor image while reputation dropped being described as “one of the worst” neighbourhoods in the country.

Nowadays, the Kolenkit neighbourhood is one of the weakest in Bos en Lommer district, in socio-economic terms (fig. 5.1), featuring statistical figures below average compared to other neighbourhoods in west Amsterdam.

The total population is 7.215 people increased by 1.500 people since 2000. Out of these only 2.288 are dutch while moroccan and turkish are the most prevailing.

Over a quarter (28%) of households consist of a family with children, 12% are single parent families while the proportion of singles reaches 43%.

The educational level is low with only 10% of the population being highly and 50% basically educated. Furthermore, 19% of 17-22 year old students no longer go to school and have no educational degree. This proportion of school leavers is higher than average in West Amsterdam (16%).

Since 2000, the Kolenkit has become almost entirely available for social rent (94%).

The houses are generally small as until 2008, 70% of the apartments were less than 60 sq.m. After several renewal projects in the neighbourhood this proportion decreased to 60%. The buying prices are rather low with the average being €167.000. Regarding rent, 72% of the total rentable stock can be found for less than €400 per month.

Unemployment in the neighbourhood reaches 15.5% of residents between 15 and 64 years of age. In absolute numbers, about 430 people in a population (15-64 years) of 4062 people do not have job and 34% are long-term unemployed (more than three years).

With an average of €22.100 per year as the disposable household income, Kolenkit features the lowest income level of all districts in West Amsterdam (€26.100).

*Fig. 5.1. Kolenkit socio-economic statistics (www.os.amsterdam.nl)*
Also remarkable is the perception of the neighbourhood inhabitants about their living environment. Residents express their dissatisfaction due to lack of maintenance, as seen from the last survey in 2009 (Stadsdeel west, 2011). They consider the physical condition of the public space as insufficient showing no improvement the last years.

Regarding livability factors, Kolenkit neighborhood “scored” the worst figures in Amsterdam. Most of dissatisfaction on the housing and residential environment in general, is about phenomena of littering, ghettolisation and the general feeling of insecurity, as well as the nuisance caused by neighbours, as too large families of different cultures live in relatively small apartments close to each other. Of course what adds to these problems are the general poverty prohibiting tenants from moving to a more suitable place, the high rate of school dropout as well as the limited command of the Dutch language (Stadsdeel west, 2011).

Moreover, attention should be also drawn on the problem of social isolation as more than half of the residents are not experiencing social cohesion in their everyday life (Azizeddine, M. et al. 2005). Issues of isolation emerge when people feel that the social network they belong into, does not meet their needs. In other words, a person’s isolation depends on the quality and extent of his/her social network which might be considered as not satisfactory and on the desire for contact that one feels (Azizeddine, M. et al. 2005). Isolation is expressed by feelings of loneliness which in case of Kolenkit neighbourhood is caused by the lack of blending between dutch local people and immigrant population that influxed the area the last 35 years. In particular, the lack of knowledge of the dutch society or even language as well as indigenous factors, like culture of certain ethnic groups (moroccan women isolation by their husbands) prevent mixing with local society and therefore social integration becomes impossible.

In addition, people living socially isolated and lonely are not likely to bring that up. Either being afraid of gossip or retaliation by their husband, disturbing others or even the unexpected reaction of their interlocutor. Most people who are socially isolated, are not able to do something to change their situation. They are often far beyond the society and are in many cases the organizations that can help them (Azizeddine, M. et al. 2005).

Towards this direction, a serious effort is made by the “bookstore project”, a local initiative in Kolenkit neighbourhood which aims at bringing people together. Organized by a group of people from different disciplines, attempts to stimulate people through events of artistic or educational character to get in contact and interact in order to eliminate phenomena of isolation and strengthen social integration.

What is finally important to state, is that the effort for social cohesion and integrity by involved volunteers and experts, should also be supported by the design of the space within which the society evolves. The spatial unification intents to reflect on the social status as it forms the platform on which people interact.

The last statement will influence the current design project refering to south Kolenkit neighbourhood aiming at:
- creation of connections and social interaction platforms on the urban space,
- redesign of the existing rather undefined communal centre building of Staess square,
- enforce social control on the neighbourhood streets by introducing living spaces in the building blocks’ groundfloors,
- reorganization of the existing building living spaces in order to serve more effectively the current users
- addition of living space in order to attract new residents as an attempt for social mixing stimulation.

Also remarkable is the perception of the neighbourhood inhabitants about their living environment. Residents express their dissatisfaction due to lack of maintenance, as seen from the last survey in 2009 (Stadsdeel west, 2011). They consider the physical condition of the public space as insufficient showing no improvement the last years.

Regarding livability factors, Kolenkit neighborhood “scored” the worst figures in Amsterdam. Most of dissatisfaction on the housing and residential environment in general, is about phenomena of littering, ghettolisation and the general feeling of insecurity, as well as the nuisance caused by neighbours, as too large families of different cultures live in relatively small apartments close to each other. Of course what adds to these problems are the general poverty prohibiting tenants from moving to a more suitable place, the high rate of school dropout as well as the limited command of the Dutch language (Stadsdeel west, 2011).

Moreover, attention should be also drawn on the problem of social isolation as more than half of the residents are not experiencing social cohesion in their everyday life (Azizeddine, M. et al. 2005). Issues of isolation emerge when people feel that the social network they belong into, does not meet their needs. In other words, a person’s isolation depends on the quality and extent of his/her social network which might be considered as not satisfactory and on the desire for contact that one feels (Azizeddine, M. et al. 2005). Isolation is expressed by feelings of loneliness which in case of Kolenkit neighbourhood is caused by the lack of blending between dutch local people and immigrant population that influxed the area the last 35 years. In particular, the lack of knowledge of the dutch society or even language as well as indigenous factors, like culture of certain ethnic groups (moroccan women isolation by their husbands) prevent mixing with local society and therefore social integration becomes impossible.

In addition, people living socially isolated and lonely are not likely to bring that up. Either being afraid of gossip or retaliation by their husband, disturbing others or even the unexpected reaction of their interlocutor. Most people who are socially isolated, are not able to do something to change their situation. They are often far beyond the society and are in many cases the organizations that can help them (Azizeddine, M. et al. 2005).

Towards this direction, a serious effort is made by the “bookstore project”, a local initiative in Kolenkit neighbourhood which aims at bringing people together. Organized by a group of people from different disciplines, attempts to stimulate people through events of artistic or educational character to get in contact and interact in order to eliminate phenomena of isolation and strengthen social integration.

What is finally important to notice though, is the fact that, besides the difficult social conditions, inhabitants feel attached to the neighbourhood, especially those who have lived there many years, as they managed to adapt it to their needs (shops, places for worship etc).

From an architectural point of view, such adaptations done by social group initiatives, mostly spontaneous and sporadic or at least not congruent with the surrounding context, are translated into built space either by the form of transformation of existing built structures or by addition of new. As mostly done without serious planning, the majority of such transformations may bring anarchy in the built environment and therefore hinder the function which they were meant for.

For such interventions of neighbourhood regeneration the architectural expertise is more than ever important in order to extract the spatial aspects out of a socially degraded context and deal with the built environment in a way that it will properly serve its users’ needs as well as fit in its contextual environment.

An example of unsuccessful adaptation can be considered the Staesstraat square in south Kolenkit neighbourhood. New functions based on social needs infiltrated the formerly existing elementary school building without any attempt of design adaptation. At the same time, new playgrounds on the square resulted in fragmented urban space.

Although such functions proved to be of high necessity for the neighbourhood, the quality of their implementation is questionable and spatial reinterpretation is essential.

What is finally important to state, is that the effort for social cohesion and integrity by involved volunteers and experts, should also be supported by the design of the space within which the society evolves. The spatial unification intents to reflect on the social status as it forms the platform on which people interact.
Conclusion

Main purpose of this analysis was to facilitate deep understanding of the conditions under which south Kolenkit neighbourhood was initially created, developed through the last 60 years since its creation and finally acquired its current image. Among others, it became rather clear that one of the most definitive factors of the neighbourhood development since 1975 has been being its society. The neighbourhood as living environment, in general, served appropriately the society which it was designed for. Immigrant influx and physical degradation though,.hindered its intended performance, increasing the need for enhancement interventions in order for the neighbourhood to meet the contemporary demands. In conclusion:

- The anthropocentric character of the initial design is profound even nowadays although its rather outdated and needs regenerating interventions.
- Although the neighbourhood has lots of green spaces, they lack design organization resembling spatial left overs and stressing the “back side” impression.
- Communal gardens between building blocks are not accessible, contributing to the neighbourhood fragmentation.
- Blocks present quite rigid structure, which may be problematic for the future architectural intervention
- Buildings have outdated image
- Buildings lack distinguishing characteristics giving a “dull” impression
- Neither flats nor outside space satisfy demands of modern society (they are morally and physically outdated)
- The new developments in the area created quality “gap” with the old buildings
- Ethnic clustering lead to impoverishment of neighbourhood image as local people were replaced by immigrants from lower social strata.
- As in the future west Amsterdam population is expected to grow, Bos en Lommer, being in favourable location is rather likely to experience high demand on house market.

Strengths:

- South Kolenkit neighbourhood is relatively rich in green spaces.
- Accessibility by public transport is sufficient almost by every means.
- Advantageous location in combination with relatively low land value are promising factors for attracting new residents.
- Enclosed urban form ensuring quiet and car safe environment.
- General architectural quality

Possibilities:

- Connective design of square and green spaces will provide integrity and strengthen the role of urban space as platform for social interaction.
- Although dwelling blocks feature a quite rigid structure, there are possibilities for supporting changes in favour of modernization and diversification of living spaces.

Design direction

In the current section a short insight is given of the way that this project intents to give answers to the posed questions.

Urban level

In social terms

The proposed solutions will involve the reformation of the educational, religious and recreational character of the Staes square re-adapting it to the needs of current residents and generally promote the social interaction.

In spatial terms

- Creation of a community centre
- Improvement of connections within Ernest Staes square and the pairs of dwelling blocks
- Promotion of the street control by introducing dwellings on the street side groundfloor
- Creation of children playgrounds, being a crucial consideration of the neighbourhood initial design.

Building level

In social terms

- Exploit and boost the opportunities for social encounters
- Exploit and enforce new social mixture

In spatial terms

- Improvement of the relation between building and surrounding environment
- Refurbishment of the complex
- Creation of more private space
- Clear expression of apartment typologies on the facade promoting also visual diversity
- Implementation of natural light and ventilation strategies
- Systematization of the solutions for effective application in all the dwellings of the complex or in other projects by introducing a generic character

Material/Detailing level

- Use of the advantages of contemporary materials and techniques
- Reduction of energy consumption

From quantitative point of view, the design will aim at increase of the dwelling spaces in favour of social development by introducing additional and more diversified population, as well as real estate exploitation, in economic terms, for the housing corporations.
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Archives

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Reflection

The current project is a part of RMIT graduation studio series, titled “Transforming Neighbourhoods” which express an ambition of TU Delft University to conduct research on degrading but culturally significant neighbourhoods, threatened by social, spatial and physical issues, in order to react with research based design. Final goal is to discover and change the generally negative reputation of potential heritage areas, through architectural regeneration.

As suggested by the studio methodology, the research was initially started by focusing on three levels of scale (urban, building, material) and involved finding, collecting and sorting all kinds of data that comprised the physical identity of the built space through time (fig. 1).

Although this scheme helped to recognize and understand the significance of the ensemble, it proved not sufficient in terms of collecting data and assessing the most influential, as later proved, factor of the neighbourhood, the social. For that reason, further adaptation of the suggested method was necessary. The research was based on thorough study of two complementary frameworks which aimed at formulating the final design directions (fig. 2). The theoretical framework, being the first part of the analysis, focused on observations and bibliography research regarding the social and spatial dimensions of the area. After data collection, value identification and assessment followed, in order to draw the focus to the most important and valuable information which would influence the design.

The empirical framework was the next part of the analysis involving data collection through communication with residents and stakeholders of the area under study. Residents and housing corporations were primary sources of empirical data gathered through interviews. An important part of this framework was the experience gained through acquaintance with relevant and already realised case studies.

Since the beginning of the 21st century the municipality of West Amsterdam, under the auspices of the Dutch State has been looking for ways to improve the residential quality and, in general, the quality of life of the western garden cities’ residents. The main goals of municipality’s future vision include the social mixing in the problematic districts along with their physical enhancement. In a few words, a social and physical balance between the city of Amsterdam and the later expansions to the west is attempted; wish that puts in the forefront the issues of districts like Bos en Lommer which generally have been gradually falling into despair. At the same time, as the country state follows an integrated policy regarding sustainable approach on buildings and sites, addressing environmental and socioeconomic issues, these aspects not only cannot be foreseen but instead, should comprise goals of any building project.

Within this frame, the current research and design project intends to offer architectural proposal in order to deal with problems that not only have a physical dimension but also a social and financial one. Although physical enhancement of an area is important step towards its general revitalization, on its own, does not ensure solution for deeper problems of the residents. Sometimes it is even used as a means of driving the low income residents away from their area, a tactic that does not solve but just transfers the social problems in another. As the residents of South Kolenkit neighbourhood are one of the most important factors of the identity of the area, it is considered crucial for architects or urbanists to propose a physical development that will focus primarily on their needs.

In the end, scope of the South Kolenkit neighbourhood re-design, is to accomplish a long-term socially, environmentally and economically feasible community. For that purpose, a set of interrelated key features were incorporated into the suggested masterplan (fig. 3).
The implementation of the above features into the architectural project of regenerating South Kolenkit neighbourhood, comprised a challenging process which involved brainstorming and reflection on every design decision. Regular reflection was crucial as facilitated deeper understanding, on the one hand of the problems needed to be solved and on the other, revealed whether a solution was suitable or not. Due to the special characteristics of the neighbourhood, mostly related to its social identity, the research method as described before, not always provided with the essential input to formulate a design approach. More specifically, although interviewing residents, as the empirical framework dictated, was helpful, often the result was to end up with contradicting opinions and demand, mostly regarding use of space or functional needs. That was mainly justified by the special character of the local society, formulated by the current inhabitants. For that reason, personal observation and study about space occupation among different cultural groups was essential for completing the missing parts and distilling a solid approach.

To wrap up, the intention of RMIT studio to formulate design proposal through research, was not the absolute case in the current regeneration project. The prominent socio-cultural diversity, further intensified by interviewees’ subjectiveness, dictated utilization of additional means, like personal observation at different times in the day in order to get a more clear idea of the way people are using the space. This was also completed by discussing with the residents pre-taken design decisions, as part of a trial and error process. In that sense, design by research principle was also enriched with research through design.

All in all, the final architectural product, meets the expectations of the designer to provide the residents of South Kolenkit neighbourhood with sufficient grips to develop social relations, bonding themselves with their living place and at the same time become part and benefit from the neighbourhood new character and identity. The time factor will finally prove the truth, as is the case with all relevant case studies.