

Materializing Identity

Utilizing inherent urban identity as a main design factor
in the inner city regeneration of Rotterdam



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Orientation

Materializing Identity:

Utilizing inherent urban identity as a main design factor in the inner city regeneration of Rotterdam

1) Problem Statement

Rotterdam is the second largest city in the Netherlands, with a relatively strong economy and rich culture. However, when it comes to urban regeneration, the municipality's planning agency often tends to develop ambitious plans that are bluntly imposed on their respective locations.

To be more specific, the governing body of Rotterdam (Dutch: Burgemeester en Wethouders, B&W) strives to stimulate the city's economy by realizing a shift towards more knowledge based enterprises (Gemeente Rotterdam 2007). In this process, a large role of the municipality's planning agency can be interpreted as the planning of the housing stock in which the new, highly educated, population is to take residence.

In order to maximize the effectiveness of such intensive urban developments, the interventions are often planned for decaying inner-city locations. This is intended to have two benefits. First of all, viewed from an economical perspective, a higher efficiency in activity can be reached due to the already urbanized location. And secondly, viewed from a socio-cultural point of view, decaying areas can also be regenerated.

As such, at first glance, the municipality's development plans seem to be thoroughly thought out and beneficial to all inhabitants.

However, in practice, an increasing number of these plans is being met with opposition from the current inhabitants. This is due to the actual socio-cultural effect that these interventions have on their respective neighbourhoods. For, in reality, it is not so much *regeneration* that is taking place, but sooner a return to *tabula rasa* and redevelopment from there on out.

In other words, due to a prioritization of economic gain over socio-cultural relevance, entire neighbourhoods are being demolished and rebuilt to house a new, economically more attractive, group of inhabitants. As a result the original socio-cultural quality of the neighbourhood, or its urban identity, is also lost. This includes the neighbourhood's communities, its culture and history; resulting also in many protests of the original inhabitants that have grown attached to these places (fig. 1).

Examples can be given by various neighbourhoods, among which Lijnbaan, Crooswijk and Pendrecht. Another example of such a case is the neighbourhood of Vreewijk, in which a large number of social housing was scheduled for demolition and replacement with more expensive private housing. As a result of the higher costs, the original inhabitants would be unable to buy their home back. This meant that they would be forced to relocate and make place for the new highly educated population; the negative form of gentrification. Luckily for these inhabitants they found a strong ally in the political party S.P. with who's help the development plans were put to a halt (Socialistische Partij 2007) (fig. 2).

Thus, urban identity forms an important aspect when dealing with the regeneration of neighbourhoods. This relevance is more extensively discussed in the chapter *Scientific and Societal Relevance*.

At this point it suffices to note that urban interventions, comparable to the one described here, are also extensively debated and discouraged in literature (see *Theoretical Framework*). As many scholars point out, the consequence is often the loss of the connection between the inhabitants and their environment (Oktay 2002)(Jacobs 1992). As such, even when these plans are set through, the result is often merely a relocation and possibly intensification of deeper lying socio-cultural problems of the original neighbourhood (Socialistische Partij 2007).

Nevertheless, in general, planners decide to continue on their present heading. This is largely do to the illusive nature of 'identity'. For how can something be factored into a design, when its spatial form is unknown? (ed. Bell & Tyrwhitt 1972)



Fig. 1: Inhabitants of the neighbourhoods in question often utilize public protests to reach a larger crowd. Large events such as the City Marathon are also utilised as opportunities for exposure. This specific banner reads: "You walk fast, Rotterdam demolishes too fast." (image: S.P., Rotterdam)



Fig. 2: Inhabitants of the neighbourhood Vreewijk protest against the municipality's plans to demolish part of their neighbourhood. The texts on the banners read: "Demolishment, sheer madness" and "Save Vreewijk." (image: S.P., Rotterdam)

2) Aims of the project

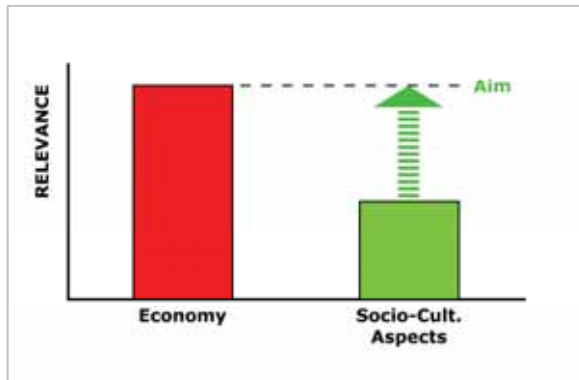


Fig. 3: Schematic representation of the project's aim (image: by author)

The question at the end of the problem statement already hints at the aim of this project, namely: Factoring-in urban identity as an element of the design process. This can also be understood as: Solving the imbalance between the relevance of economy (top-down) over socio-cultural aspects (bottom-up) (see fig.3).

For the sake of a clear project focus, the socio-cultural aspects are also taken as the starting point of the graduation project. Hence the subtitle: 'urban identity as a main design factor'.

To be more specific, the goal of the project is to: (A) Identify and evaluate the current state of urban identity in the neighbourhood Feijenoord (fig. 4); (B) determine how one can develop it, in balance with the other urban developments; and (C) translate the findings on urban identity to an actual urban strategy and architectural design: *'Materializing Identity'* (title). (See also *Expected Final Product*)

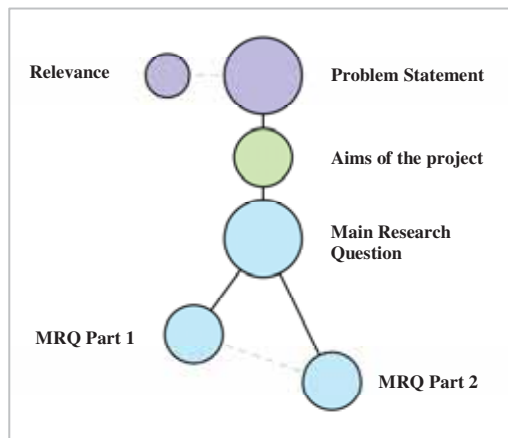
To this end a main research question has also been formulated.



Fig. 4: The neighbourhood of Feijenoord, which forms the spatial framework for the project *"Materializing Identity"*. (image: Google Earth 2010)

3a) Main Research question

Formulated as one question which drives the entire research behind the project, the main research question can be read as:



How can the current neighbourhood of Feijenoord be regenerated to meet future requirements in relation to the municipality's vision, while maintaining the disadvantaged groups currently residing in the area, so the inhabiting social structures/communities and the emergence/consolidation of the local culture is also stimulated?

In order to provide a clear frame in which to conduct the following research, it is wise to first elaborate on this main question and its crucial parts. A first step in elaborating the question is its splitting up into two parts, being:

- 1) *How can the current neighbourhood of Feijenoord be regenerated to meet future requirements in relation to the municipality's vision, while maintaining the disadvantaged groups currently residing in the area?*
- 2) *How to stimulate the inhabiting social structures/communities and the emergence/consolidation of the local culture?*

Part 1 of the main research question

The first part places local urban identity in the broader context of other, more dominant processes, that are driven by national economy and planning. Thus, this question expounds on the problem as described in the earlier *Problem Statement*.

To do so, this question investigates the perspectives of two parties on the matter of the '...inner-city regeneration of Rotterdam' (subtitle). On the one hand, the municipality's point of view is evaluated, on the other, the situation of the inhabitants is researched. Thus, this first part enables one to find initial similarities between both perspectives, which can then be further evaluated in part 2 of the research.

Part 2 of the main research question

In the second part of the main research question the attention continues to shift more towards the neighbourhood of Feijenoord, as a subject of research onto itself. The research on urban identity, in the form of inhabiting social structures and communities, is what forms the focal point of this research question. As such, utilizing a bottom-up approach, this question also represents the 'inherent urban identity' as described in the subtitle. And combined with the research conducted in part 1, it also forms the second step towards the 'Utilizing' of urban identity as 'a main design factor' (fig. 5).

3b) Sub Research questions

Sub-Question 1:

Continuing with the structuring of the research, one can go on to split both main questions into sub-research questions. As we can recall, part one of the main question evaluates two perspectives on the matter of inner-city regeneration. Namely the view of the municipality and the situation of the inhabitants:

How can the current neighbourhood of Feijenoord be regenerated to meet future requirements in relation to the municipality's vision, while maintaining the disadvantaged groups currently residing in the area?

As such, sub-questions one and two also focus on these two perspectives.

The view of the municipality is researched first, seen as it provides the greater context:

- *What are the future requirements that the neighbourhood of Feijenoord needs to meet, in the spatial and social context, with respect to the municipality's vision?*

Direction of study:

Issues that come into play, when asking such a question are:

Is there a need to attract certain population groups?

If so: Which groups? High income people? Creative people?

And why: What are the qualities that they bring with them?

What issues are they suppose to solve?

What goals do they help the city achieve?

And, is this actually the wise course of action?

How about jobs: Is there a need for more jobs in the neighbourhood?

How many? Which types?

What will there spatial impact be? A need for more buildings? A need for more infrastructure?

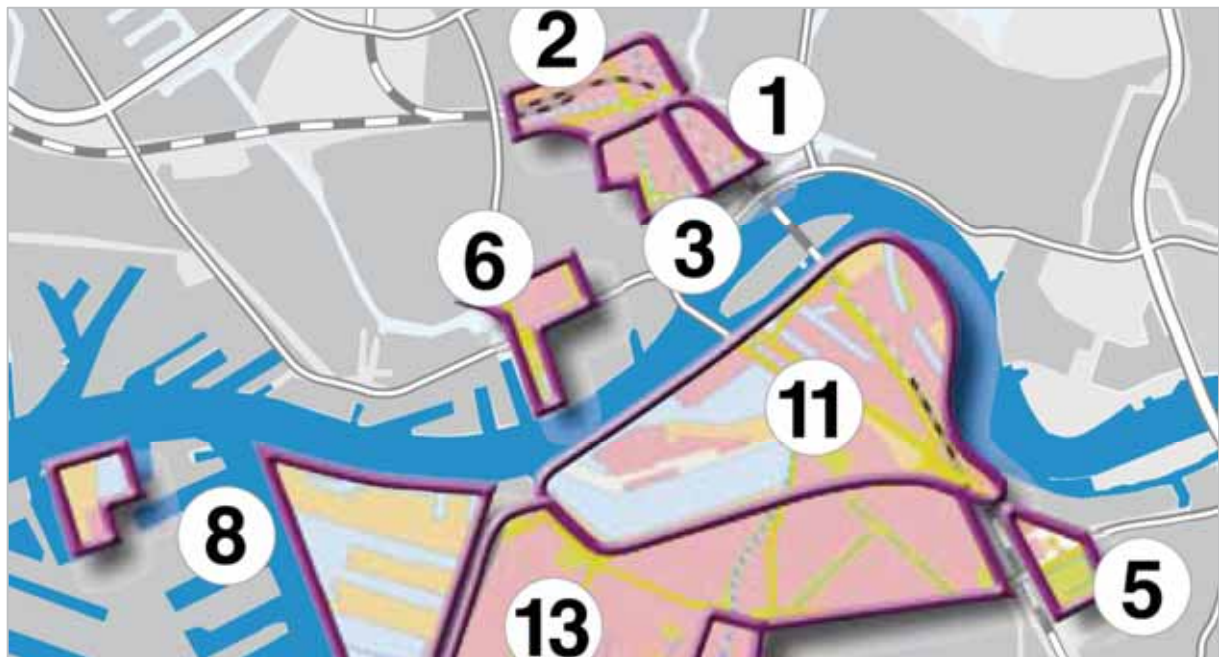


Fig. 6: Taking Rotterdam's "City-Vision 2030" as the largest scale of research; what are the requirements that have to be met by zone 11, which includes Feijenoord? (image: Stadvisie Rotterdam, 2030)

Methodology and possible sources:

The main method to answer this sub-question will have to be a study of the literature currently available on the position of Feijenoord in Rotterdam. Preliminary sources are:

1 - Rotterdam Vooruit: A masterplan for the entire Rotterdam region, developed by the national government, the province South Holland and the municipality of Rotterdam. Studying this masterplan can help determine which elements of the neighbourhood-level plans are deemed crucial for the regions general welfare.

2 - Stadsvisie Rotterdam 2030 (2007): A vision for the municipality of Rotterdam by the municipality's planning agency (fig. 6). This document addresses the city as a whole. As such, it can provide a more detailed insight in the role that Feijenoord is to fulfil according to Rotterdam's planning agency.

3 - Vision Kop van Feijenoord (2008): A vision that is specifically made for Feijenoord by B.S.G.V. (*Dutch: Bureau voor Stedebouw*) (fig. 7). This vision is still in its conceptual phase, but already it provides a good insight in the municipality's views concerning the neighbourhood.

4 - 4th Biënnale Rotterdam *IABR* (2009): An exposition concerning architecture that is held every two years. In doing so this exposition shows the image that the city strives to emanate. Thus, studying this, and similar, expositions also provides an insight into the municipalities architectural preferences.



Fig. 7: What parts of the City-Vision are to be realised in Feijenoord and what does this exactly imply for the neighbourhood? (image: visie Kop van Feijenoord)

Sub-Question 2:

In sub-question two the focus shifts to the situation of the inhabitants.

“...while maintaining the disadvantaged groups currently residing in the area?”

To be more specific, the research of sub-question two assists in determining what the shared interests are of the municipality and the inhabitants, by expounding on the situation of the inhabitants.

To this end a more specific sub-question is also formulated:

- Which type of people make up the population of the neighbourhood Feijenoord? (And why are they called disadvantaged?)

Direction of study:

When investigating the situation of the current inhabitants, specific questions that can be researched are:

What is the economical capability of the inhabitants?

Low income? If so, how come? Low education?

Bad control of language?

How about the domestic situation?

Small families? Big families? Lots of children? If so then the neighbourhood also has a lot of children, with all the necessary spatial implications (playgrounds, child friendly streets, etc.)

Which (other) age groups does Feijenoord house?

Elderly? Teenagers?

What is the general evaluation of the inhabitants' health?

Which ethnicities and cultures reside in Feijenoord?

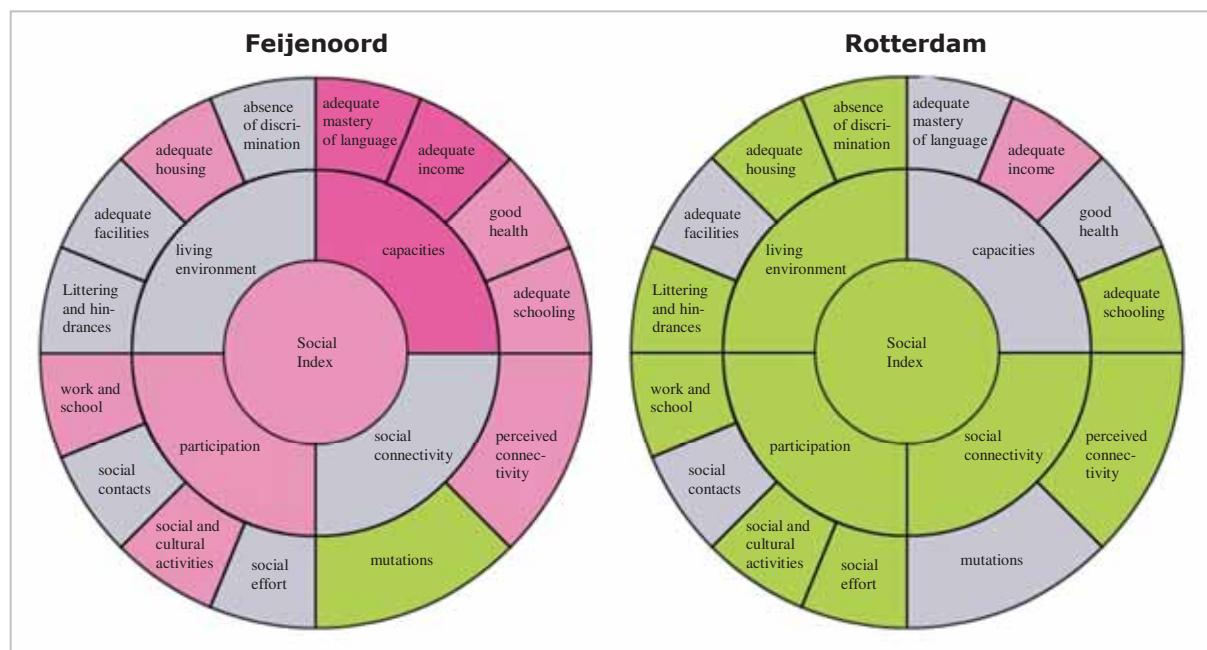


Fig. 8: The “Social Index” gives an indication of a neighbourhoods social state which is based on statistical data. On which specific themes is Feijenoord in the red (negative) and why? (image: Rotterdam Data)

Methodology and possible sources:

Methods and possible sources that can provide an answer to these questions are:

1 - Rotterdam Data and GisWeb 2.0: Two databases that are maintained by the municipality and provide demographic and statistical data on the entire city and its neighbourhoods.

2 - C.O.S. (*Dutch: Centrum voor Onderzoek en Statistiek*): An independent research institution that conducts research on various aspects of Rotterdam (demographics and statistics). This institution is also known to publish detailed research on specific neighbourhoods (fig. 8&9). As such, a report on Feijenoord can provide a crucial insight into the situation of the inhabitants.

3 - Interviews with the inhabitants of Feijenoord can also provide a very bottom-up view on the situation in the neighbourhood.

4 - In addition to the bottom-up view of the inhabitants, interviews with the human geographers, that actually map(ped) the neighbourhood, can also provide a more objective point of view.

5 - The Living-spheres analysis (*Dutch: Leefvelden analyse*): This can be considered as the structuring element for the data acquired in sub-question two. As such, this L.S.-analysis is actually also a tool/method that allows the researcher to clearly structure his data and even find correlations.

The L.S.-analysis can be developed as a spreadsheet and/or a collection of maps.



Fig. 9: Reports of COS can provide an additional insight into the inhabitants situation. In the above situation the red areas, for instance, visualize inadequate housing. (image: COS wijkanalyse Feijenoord)

Intermission:

At this point in the research it is wise to insert a break in order to combine the data acquired in sub-questions one and two (fig. 10). This enables one to find the correlations between the municipality's wishes and the needs of the original inhabitants, which ultimately answers the initial question:

How can the current neighbourhood of Feijenoord be regenerated to meet future requirements in relation to the municipality's vision, while maintaining the disadvantaged groups currently residing in the area?

In practice this combining of data will (of course) be taking place during the research. As such, up to this point the research can be visualised as depicted in figure 10.

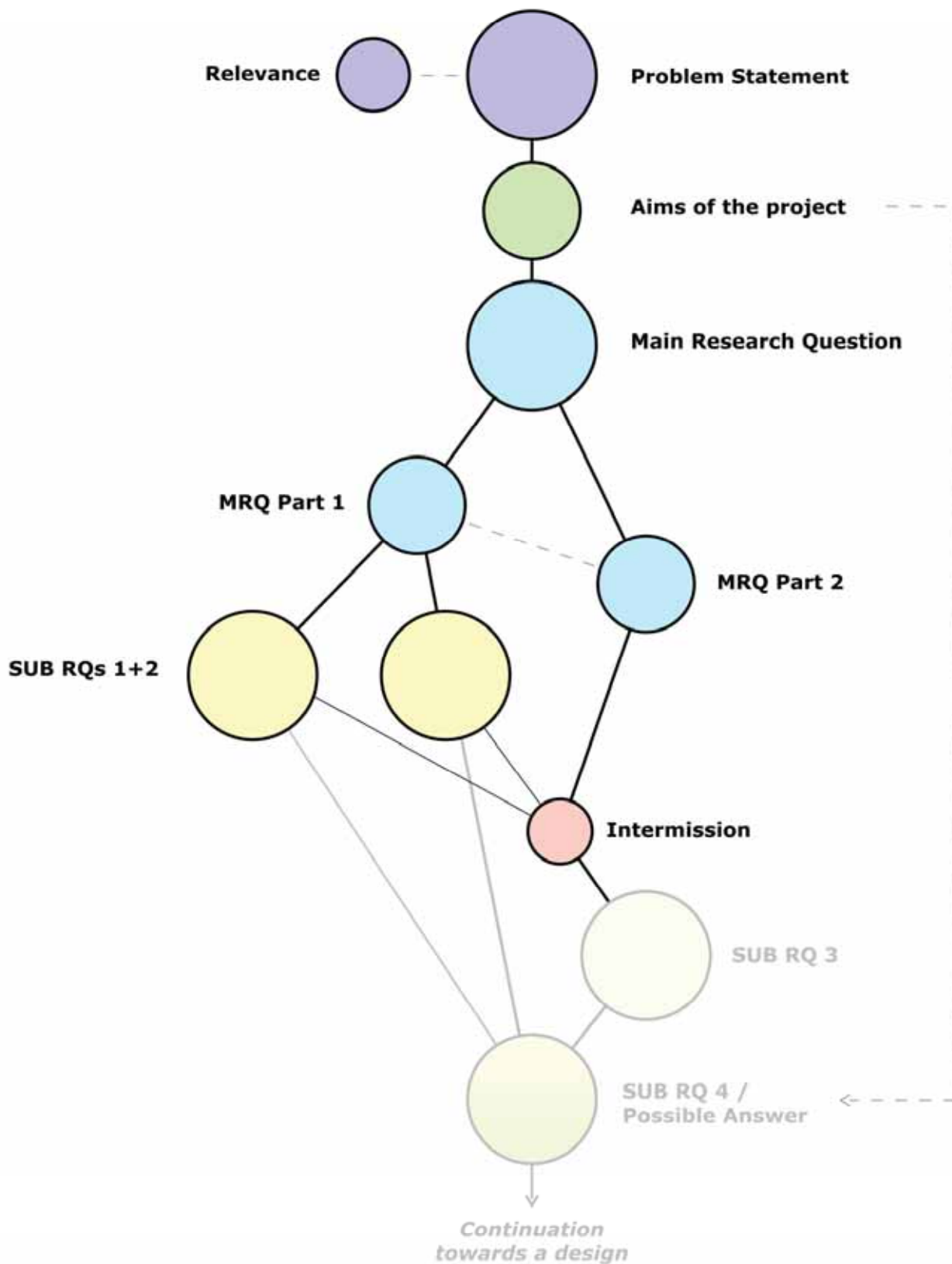


Fig. 10: As described in the chapter “Main Research Question” the goal of the intermission is to find correlations in the data from sub-questions 1 & 2. These correlations can then be utilised to determine a more accurate direction of study for sub-questions 3 and (eventually) s.r.q. 4. (image: by author)

Sub-Question 3:

Having found the correlation in the interests of the municipality and the inhabitants, the research continues in search of elements that can function as the catalysts, or crystallization points, for the process of urban regeneration. As has been explained before, any intervention will aim to:

“...stimulate the inhabiting social structures/communities and the emergence/consolidation of the local culture?”

As such, the crystallization points will also have to be spatial elements, or activities, that have a certain significance to the inhabitants. In other words, the interventions need to address the general culture of the neighbourhood (utilizing urban identity). Before this can be done however, one first needs to clarify what the current general culture, or urban identity, of Feijenoord is. Sub-question three thus reads:

- What makes up the culture of the disadvantaged groups currently residing the neighbourhood of Feijenoord?

Direction of study:

Additional questions that can direct this research are:

How does the local culture express itself in spatial forms?

Sports(fields) for the young inhabitants? A community centre for the elderly?

A mosque or church for religious purposes?

What spatial elements are crucial for the local culture? (fig. 11)

Perhaps a specific sports field itself is not crucial, as long as somewhere there is a field to play on.

However, a specific mosque in a specific place might be important.

What position do more pragmatic factors have in the local culture?

Have the people (*referring to the disadvantaged groups in Feijenoord*) for instance grown attached to a shop or café in a certain place?

Do the people desire more or less of such facilities?

How about public transport connections?

Infrastructural connections?

What spatial and programmatic elements need to be improved or added in order to better answer to the wishes/customs of (primarily) the local disadvantaged groups? (fig. 12)



Fig. 11: What is the value of a seemingly abandoned park at the edge of the neighbourhood? (image: by author)

Methodology and possible sources:

As has been stated by various scholars, culture and identity are complex issues to research. An investigation that needs to be conducted from the ground up would therefore also require to much time, in reference to the master track.

Luckily, in the past few years, Rotterdam has been paying an increasing amount of attention to the issue of culture. Consequently a lot of research has already been conducted on the matter and various institutions have also been founded. Examples are:

1 - De Stad als Muze: A project, set up by the Historical Museum Rotterdam, which aims to map the various ways in which Rotterdam's inhabitants use and value their city. Seen as this research is also being conducted on neighbourhood scale, it is potentially a very significant contribution to my own research on Feijenoord.

2 - Monumentenzorg: In terms of spatially valuable elements, Monumentenzorg can also provide a significant input. This is an institution which aims to preserve buildings and sites that are considered as relevant for the general culture and achievements of the Dutch society. In order to do so, Monumentenzorg will also have setup general criteria for the evaluation of buildings. The intent is to apply these criteria to Feijenoord, thereby determining which spatial element of the neighbourhood are valuable. Of course a review of possible prior evaluations can also be utilized.

3 - Workshops Mental Mapping: Workshops in Mental Mapping can be utilised as a tool to approach inhabitants and stimulate them in giving their own opinion on their neighbourhood. It is after all the original inhabitants that form the main target group of the project. Similar workshops are also utilised by the Historical Museum and the Field-Academy Rotterdam (a field division of ExploreLab). Approaching these parties and learning from their experiences beforehand thus also seems a wise course of action.

4 - Community Groups: Community groups provide another angle from which to approach the inhabitants. Examples are the religious organisations, sports organisations and the community housing association (*Dutch: Bewonersorganisatie*).

5 - Newspaper articles: A more indirect way to acquire information could also be the review of newspaper articles. Articles in the local newspaper, in which inhabitants for instance protest to certain development plans, can point out the sensitive aspects of the neighbourhood.

6+7 - Questionnaires + Interviews (with the local inhabitants) add to the above methods.



Fig. 12: What does a facility like a sports hall (left) add to the neighbourhood? And if necessary, how can it be improved? (image: by author)

Sub-Question 4:

Sub-question four forms the last question of the research. Prior to this question the conducted research will have pointed out which urban issues need to be addressed in the regeneration project (sub-questions 1 and 2) and which elements of the neighbourhood can play a crucial role in this regeneration (sub-question 3). The aim of sub-question four is to determine how these results can be developed into an actual urban and architectural design (Materializing Identity). Thus, sub-question 4 in a way forms the actual design question:

How can the valuable (cultural) aspects of Feijenoord be developed along with the new requirements in a harmonious/liveable way, which benefits both the original inhabitants and the newcomers?

Direction of study:

In reference to the *Problem Statement*, sub-question four can also be interpreted as the point in the research where the solution to the current imbalance between the economic and socio-cultural aspects is actually materialized as a design.

Questions that need to be addressed while actually developing such a design are:

What exactly can be considered harmonious/liveable, in terms of combining the found socio-cultural values (bottom-up) with the desired city-scale developments (top-down)?

- Does it, for instance, suffice to simply preserve all the spatial elements that were labelled as valuable by the local inhabitants (in sub-q. 3)?
- Or is change desirable, which can then be combined with the city-scale developments on a local, neighbourhood scale?

If change, in the form of transformations or additions, is desirable by the inhabitants of Feijenoord; then till what extent are these changes allowed to take shape?

- Till what point does the actual target-group (of Feijenoord inhabitants) perceive spatial changes as an evolvement or uplift of their local society/culture?
- And when do these changes 'cross the line' and are they considered incursions, thus stating that they are undesirable by the primary target-group?



Fig. 13: How did a case like the new Lijnbaanflats handle the various issues of culture and identity? What lessons can be applied to the neighbourhood of Feijenoord? (image: top10.nl)

Methodology and possible sources:

Seen as sub-question four has a more design related character than the other sub-questions, the respective methodologies and sources adapt to this characteristic. Useful methodologies and sources thus become:

1 - Literature reading: The evaluation of literature that discusses the spatial characteristics of similar designs and their underlying approaches and theories. For specific example reference is made to the *Preliminary Literature* list and the *Theoretical Framework*.

2 - Case-studies of reference projects, among which:

- Evaluating previous research conducted by Palmboom&Bout office on the inner city of Rotterdam, concerning the development of additional housing units in an already populated area. (New Lijnbaan-flats) (fig. 13)
- Evaluating previous research conducted by KCAP office concerning the development of a large public facility (a new football stadium), which is located near the neighbourhood of Feijenoord. (fig. 14)

3 - Developing specific case oriented insight, by conducting Research by Design on the neighbourhood of Feijenoord.

A more extensive description of the expected products is also included in the chapter 'Expected Final Product'.



Fig. 14: What implications do large facilities have for their surrounding location? And what effect do large urban projects, near Feijenoord, have on the neighbourhood. (image: KCAP; New soccer stadium)

4) Societal and scientific relevance

As is often stated by the many scholars that have preceded in a comparable study, the issue of 'identity' is a most illusive one. Thus, prior to elaborating on the relevance of this issue, a definition is needed.

Following the path of one of these predecessors (Oktay 2002) one can turn to a dictionary for a preliminary definition. The *Miriam-Webster Online Dictionary* (2010) for instance defines 'identity' as 'the distinguishing character or personality of an individual'.

A more urban natured definition is given by Kevin Lynch (1981) whom defines 'identity' as 'the extent to which a person can recognize or recall a place as being distinct from other places'.

Societal relevance:

Thus, like individuals, places in cities can obtain an identity though the people that inhabit or visit these places. Consequently however, seen as the identity of each individual is unique, the identity of one specific place can also consist of numerous characteristic elements.

Furthermore, the form/appearance and programming of a place also play a defining role in the identity of the inhabitants; identity here also implying the wellbeing of the inhabitants. Thus Identity of place and identity of the individual become intertwined and affect each other in an ongoing interaction. The relevance of this ongoing interaction, or the need for 'identifiable places' is best summarized by Relph (1976, p 147):

A deep human need exists for associations with significant places. If we choose to ignore that need, and follow the forces of placelessness to continue unchallenged, then the future can only hold an environment in which places simply do not matter. If, on the other hand, we choose to respond to that need and transcend placelessness, then the potential exists for the development of an environment in which places are for man, reflecting and enhancing the variety of human experience.

One can also interpret the above explanation as the reason why neighbourhoods decay over time. For, with the passing of time, it is not only the buildings that degrade, but it is also the ability of the place to facilitate in the inhabitants cultural and societal needs that becomes outdated. This can also be found as one of the reasons why the financially better off (and higher educated) move away. In other words, the place loses its significance to the inhabitants; its ability to 'reflect and enhance the variety of human experience.'

As has been explained in the problem statement, the result of such movements in population can have a negative impact on the urban economy. However, what is even more relevant is the 'solution' that is imposed by the municipality: Regeneration through gentrification; with a prioritization of economic gain over the relevance of the socio-cultural aspects. This often leads to a further destruction of the few significant qualities that the neighbourhood had left and it leads to a forced displacement of the inhabitants that weren't financially able, or desiring, to relocate.

Thus we get to the societal relevance of *Materializing Identity* through the *utilization of inherent urban identity*. Namely, the stimulation of the inhabiting social structures/communities and the emergence/consolidation of the local culture (main R.Q.).

Scientific relevance:

As is stated by Oktay (2002), in his evaluation of *Place and Placelessness*, discovering and enhancing the identity of a place or city can yield many advantages. The connection between people and place can be strengthened; local inhabitants can be stimulated to participate in the communal welfare; vandalism can be wiped out; problematic neighbourhoods can become attractive residential areas, etc.

However, as stated before, the main issue with ‘identity’ is that it consists of numerous characteristics and varies by place and time; it is illusive by nature (Fortuin & Van der Graaf 2006). Consequently, the exact method(s) by which to discover, evaluate and then enhance urban identity has also eluded scholars and scientists for considerable time (ed. Bell & Tyrwhitt 1972).

Developing such a methodology then poses a most challenging, tempting and relevant research subject. Nonetheless, however scientifically relevant, the development of such a methodology may be, it is not the fitting task for this specific thesis.

The scientific relevance of urban identity however persists, undiminished.

This thesis thus also continues striving to shed some additional light on the issue.

The neighbourhood of Feijenoord, in a sense, becomes a frame that provides a more solid basis for research. Limiting the main target-group to that of the local inhabitants of Feijenoord further strengthens the grip on the illusive issue of identity.

In other words, this thesis is scientifically relevant, in that it provides an additional insight into the *utilization of urban identity*, in case study form.

5) Theoretical framework

The theory which forms the framework for this graduation project is extensively discussed in the attachment. At this point it suffices to state some of the most relevant theoretical contributions to the framework. Namely, Relph's (1976) assessment of the need for 'human places' in his work *Place and Placelessness*; Christopher Alexander's assessment of a city as being a complex structure (or semi-lattice) of overlapping social networks and public nodes; and Derya Oktay's (2002) dissertation on neighbourhoods as a vital element in urban development.

These sources are relevant in forming the theoretical framework of the graduation project, in that they all evaluate and underline the importance of the socio-cultural and low-scale aspects of urbanism. Relph, for instance, strongly stresses the need for an approach in which the inhabitants assessment of his/her environment is addressed and improved (*see Societal Relevance*).

Derya Oktay and Christopher Alexander both evaluate the role of the neighbourhood as a key (low-scale) element of the city. Alexander takes this evaluation somewhat further than Oktay, in that he also investigates the various networks that exist within a neighbourhood; social networks and otherwise. An example is his research on the Waterloo Road neighbourhood in Middlesbrough, England. Finding that neighbourhoods house complex networks resembling complex semi-lattices (fig. 15), Alexander states that an inappropriate handling of these complex networks is also what causes new development plans to be so incursive (fig. 16). As such, his theory and recommendations play a vital role in determining what type of development plans are appropriate.

Lynch's (1960) *The Image of the City*, forms a good addition to this, seen as his theories and approaches have a more direct relation to the spatial aspects of urbanism and architecture (fig. 17 & 18). Other contributors to the theoretical framework are, for example: Fortuin & Van der Graaf (2006), Urry (2003) and Castells (1996).

However, for a more indebt evaluation of these theories I again refer to chapter two.

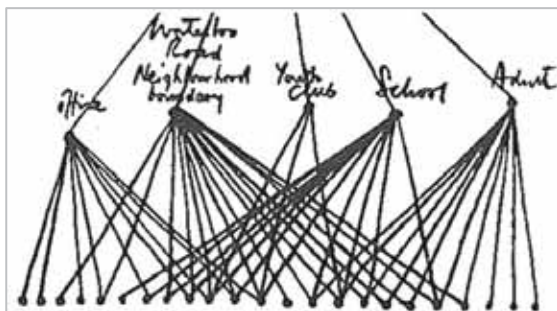


Fig. 15: The actual complex structure of Waterloo Road as found by Alexander (Alexander 1972)

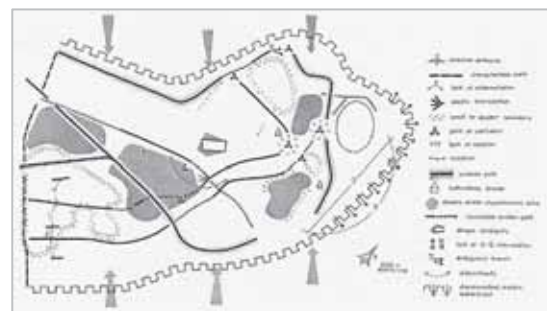


Fig. 17: Lynch's assessment of Boston's image related problems (Lynch 1960)

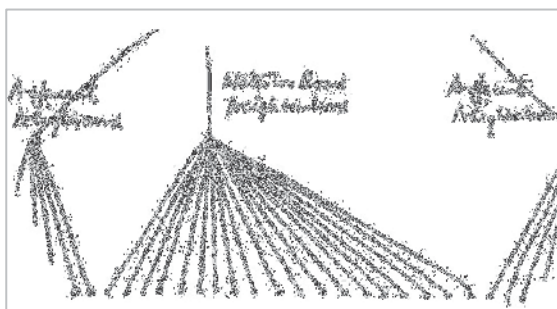


Fig. 16: The new, incursive, tree-like scheme for Waterloo Road as suggested by Ruth Glass (Alexander 1972)



Fig. 18: According to Lynch, large infrastructural elements play an important role in the image of the city (Central Artery, Boston, Lynch 1960)

6) Methodology

As has been elaborated in previous chapters, the methodology behind this research on ‘urban identity’ consist of various techniques and source types.

The implementation of these techniques therefore will also vary depending on which sub-element of urban identity is being researched. An overview of these sub-elements is provided in the form of the previously discussed research questions.

7) Expected final product

As has already been discussed in the “relevance” section, the issue of identity is a most complex and illusive one. Nevertheless, a product in the form of a spatial design, that deals with this issue, needs to be delivered.

Setting up a spatial frame in the form of the neighbourhood Feijenoord and focussing the research on one target group, namely the inhabiting population, helps narrow down the variables.

Even so, one can already predict that numerous and diverse variables will still play a decisive role in the spatial form of the design. Variables that will be clarified through the research questions.

Therefore, at this stage, only a prediction and some examples can be given as to what the final product might become. In order to give such a prediction one might look back at the various elements of identity as stated in this thesis.

As one might recall, evaluating the basic characteristics of ‘identity’, it has been concluded that identity is 1) diverse and 2) constantly evolving. From this it can already be stated that the eventual design therefore should also A) appeal to the diverse characters/identities of the local inhabitants and B) should be able to facilitate changes in these characteristics over time, in spatial terms. These two qualities will be applied both to the urban plan as to the architectural design. Of these two, the architectural design will most likely be the more flexible one, seen as buildings are often more easily adapted than urban structures.

Additionally, seen the nature of the design is to be a materialization of identity, the adaptability of the architectural work will also have to be included in its very nature. Here the “Hybrid Building” design offers an outcome. For assistance in this design-style a teacher has also been provided, namely Ir. W.W.L.M. Wilms Floet. In addition Ir. H. Muhl will assist in the area of construction.

The most challenging and interesting aspect of such a Socio-Cultural Hybrid Building will however not only lie in its design and construction, but sooner in the question of how adaptable it will be. Will the building for instance strive to facilitate all the wishes of every individual? If so then one building most likely will not be enough. Every individual would need his/her own building. It would therefore be more effective, not to facilitate each and every individual characteristic, but to discover and spatially strengthen a ‘shared characterising denominator’ (*Dutch: gemeenschappelijke noemer*) of the local inhabitants. What this shared characteristic denominator is (*religion, sports, landscape?*) will follow from the earlier proposed research.

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11) Preliminary Literature

Alexander, C. 1972, 'A City Is Not a Tree', in G. Bell & J. Tyrwhitt (ed.), *Human Identity in the Urban Environment*, Butler & Tanner Ltd., London, pp. 401-428.

Bell, G & Tyrwhitt, J (ed.) 1972, *Human Identity in the Urban Environment*, Butler & Tanner Ltd., London.

Bureau voor Stedebouw 2008, *Visie Kop van Feijenoord: fase 2 Kop van Zuid*, Bureau voor Stedebouw, Rotterdam.

Gemeente Rotterdam 2007, *Stadsvisie Rotterdam: Ruimtelijke ontwikkelingsstrategie 2030*, Gemeente Rotterdam, Rotterdam.

Fortuin, K & Van der Graaf, P 2006, *De stad verhaalt van de stad: Rotterdamse lokale identiteit en cultuur als hulpbron*, Verwey-Jonker Instituut, Utrecht.

Jacobs, J 1992, *The death and life of great American cities*, 2nd edn, Vintage Books, New York.

IABR, 2009, *Open City: Designing Coexistence*, Veenman Drukkers, Rotterdam.

Kostof, S 2009, *The city shaped*, 2nd edn, Thames & Hudson Ltd, London.

Lynch, K 1960, *The Image of the City*, M.I.T. & President and Fellows of Harvard Collage, U.S.A.

Lynch, K 1981, *A Theory of Good City Form*, M.I.T. Press, Cambridge.

Oktay, D 2002, 'The quest for urban identity in the changing context of the city: Northern Cyprus ', *Cities*, vol. 19, no. 4, pp. 261-271, viewed 8 march 2010, <<http://sciencedirect.com/>>.

Relph, E 1976, *Place and Placelessness*, Pion, London.

Venturi, R, Brown, DS & Izenour, S, 1977, *Learning from Las Vegas*, Rev. edn, The MIT Press, Massachusetts.

Socialistische Partij 2006, 'Vreewijk: 94 procent tegen sloop', *SP Rotterdam*, vol. 56, no. 1, viewed 10 February 2010, < <http://rotterdam.sp.nl/>>.

Significant Additions

Veldacademie Rotterdam/Rotterdam Vakmanstad, 2011, *De Nieuwe Belangstelling*, Veldacademie, Rotterdam.

Novem, 2000, *Vademecum*, 2nd edn, Novem & Boom, Utrecht/Maastricht

Theoretical Framework

Materializing Identity

Utilizing urban identity as a main design factor in inner city regeneration

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Abstract – In order to create good urban environments city planners need to start addressing the issue of urban identity (Oktay 2002). According to Oktay, people should again feel that some part of the environment belongs to them, individually and collectively, some part for which they care and are responsible, whether they own it or not. For, as Oktay also states, people use their environment not only in a functional way, but also identify and express themselves through it. In a sense people form their environment and their environment forms them and it is exactly this role of spatial form that is being forgotten in the urban planning (Fortuin & Van der Graaf 2006).

In addition Fortuin & Van der Graaf point out that increasingly such issues, of socio-cultural nature, take a backseat to the economic issues. Such projects often limit their impact on identity to that of the economical relevance of the 'image' or 'brand'. Municipalities thus tend to develop ambitious plans that are bluntly imposed on their respective locations, in order to 'sell' the city (Jacobs 1992). In doing so however, any trace of the original urban identity is wiped out, including the communities, the culture and history. Consequently also the connection between the original inhabitants and their environment is lost, resulting in undefined, undesirable, useless and unliveable spaces (Oktay 2002).

Nevertheless, in general, planners decide to stay this course. This is largely do to the illusive nature of 'identity'. For how can something be factored into a design, when its spatial form is unknown (ed. Bell & Tyrwhitt 1972)? This paper thus provides a solid grip on the issue of identity. More specifically, the goal is to identify and evaluate the spatial form of urban identity in inner cities, through its sub-elements of public space and the neighbourhood. In doing so, this paper assists in the building of the theoretical framework of the author's graduation project, which proposes strategies and interventions for the regeneration of problem-neighbourhoods (*dutch: probleemwijken*) in the inner city of Rotterdam in the Netherlands.

Key words – Urban identity, community, spatial form, architectural form, urban planning, inner city

1 Introduction:

Definition and problem statement

'Identity' can be defined as "the distinguishing character or personality of an individual" according to the *The Miriam-Webster Online Dictionary* (2010). A more urban natured definition is given by Kevin Lynch (1981) who defines 'identity' as "the extent to which a person can recognize or recall a place as being distinct from other places".

Thus, like individuals, places in cities can obtain an identity through the people that inhabit or visit these places (Oktay 2002). Consequently however, seen as the identity of each individual is a distinguished or unique one, the identity of one specific place can also consist of numerous characteristic elements. Nonetheless the need for identifiable places persists. This need, or relevance is best summarized by Relph (1976, p. 147):

"A deep human need exists for associations with significant places. If we choose to ignore that need, and follow the forces of placelessness to continue unchallenged, then the future can only hold an environment in which places simply do not matter. If, on the other hand, we choose to respond to that need and transcend placelessness, then the potential exists for the development of an environment in which places are for man, reflecting and enhancing the variety of human experience."

Hence, discovering and enhancing the identity of a place or city can yield many advantages (Oktay 2002): The connection between people and places can be strengthened; local inhabitants can be stimulated to participate in the communal welfare; vandalism can be wiped out; problematic neighbourhoods can become attractive residential areas, etc.

However, as stated before, the main issue with 'identity' is that it consists of numerous characteristics; it is illusive by nature. Consequently, the exact method(s) by which to discover, evaluate and then enhance urban identity has also eluded scholars and scientists for considerable time (ed. Bell & Tyrwhitt 1972).

The graveness of this illusive nature is also expressed by Pinxten & Verstraete (ed. 1998, pp. 35-37), who state that: "Each attempt to base a national or other identity on basic characteristics fails, when we approach the matter geographical, historically or even psychologically. Identities change, shift, grow and constantly adapt to the situation in which the person or group finds itself. Identity is a continuous process of self realisation. Each image, each well-defined shape of identity is merely a snap-shot of this continuous process. [...] Identity is a layered and dynamic phenomenon. For this reason we preferably speak of 'identity dynamics', in the plural and with the emphasis on the process aspect in stead of the products of these processes."

Thus, following this formulation, identity has to be approached as an ongoing process. It is not, so much its physical form, but its development that needs to be addressed.

As is stated by Fortuin & Van der Graaf (2006) this development of identity takes place through the exchanging of meanings in social interaction. This exchange of meanings, or perceptions, is most intensive on the interfaces between different communities. It is here that the role of space and the relevance of urbanism and architecture becomes apparent. To be more specific, Fortuin & Van der Graaf go on to state that the most general platforms for interaction is that of the urban public space.

It is there that ones own identity is profiled against numerous others and where it is most susceptible to debate. It is also there that the process of self realisation is most intense.

Thus, according to Fortuin & Van der Graaf, the exact shape of the urban space is not only a product of the 'identity dynamics' as described by Pinxten & Verstraete. Nor does it merely obtain identity through its users. Urban space is also a key player in the actual forming of identities.

As such, expounding on the characteristics of urban space and evaluating their role in forming a staging ground for the ever changing process of identity is the goal of this paper. Additionally recommendations are also made as to how one can best address the issue of urban identity on its various complexities.

In order the structurally evaluate these various complexities of urban identity the focus will also be on specific aspects of the urban environment, among which: The public space and the neighbourhood.

Additionally, an evaluation is also made on the effect of globalism on urban identity.

In doing so this paper also provides an crucial insight on the relation between urban space and identity. This insight will be utilised in building the theoretical framework for the author's graduation project, which proposes strategies and interventions for the regeneration of problem-neighbourhoods (*dutch: probleemwijken*) in the city of Rotterdam in the Netherlands.

2 The role of public space

2.1 Introduction to public spaces

When urban identity is considered, many scholars and theorist agree on the crucial role of the public space. Oktay, for instance, describes the way in which we perceive and interpret the visual forms that provide the physical context for the public domain as "an important factor associated with the urban experience" (Oktay 2002, p. 263). In addition to providing an arena for public circulation, Oktay however also describes the public domain as a provider of many spaces for a wide range of additional functions and activities. In a more definitive description, public space is also considered "the common ground where people carry out the functional and ritual activities that bind a community, whether in the normal routine of daily life or in periodic festivities" (Carr *et al.* 1992, cited in Madanipour 1996, p. 146).

The best evidence for the vital importance of the public urban space is perhaps historical. As Oktay brings forward, "from the times of the earliest cities, there is evidence of a basic human impulse to govern streets and open spaces, to make them more useful in the necessary and desired activities of the old and to make them more beautiful and to make them more beautiful and restorative to the citizens of the community" (Oktay 2002, p. 263).

As such, the focal points of this basic human impulse, being the streets and squares, are often considered the most vital components of the public space (Oktay 2002) (Jacobs 1992, ed.).

2.2 The role of streets

The street can be defined as "the prime exterior space of the city and an intrinsic component of the urban pattern" (Oktay 2002, p. 263). According to Oktay the street also has two main characteristics directly related to form.

The first is that it is, at one and the same time, both path and place. The aspect of place is elaborated in reference to history, in which the street has provided urban communities with public open space right outside there door. Norberg-Schulz (1971, p. 21) symbolic definition of the path, puts an additional emphasis on the relevance of the street. As he states "On the plane, man chooses and creates paths which give his existential space more particular structure. Man's taking possession of the environmental

always means a departure from the space where he dwells, and a journey along a path which leads him in a direction determined by his purpose and his image of the environment. [...] The path, therefore, represents a basic property of human existence, and it is one of the great original symbols”.

As such, the path can be interpreted as a route that is unique for each individual. At the same time however, it also needs to be noted that, as unique as one's path might be, all paths exist within the same framework (Alexander 1972).

This framework of urban public space is the second characteristic of the street, or more accurately: streets (Barnett 1982) (Moughtin 1992).

It is the way in which the characteristics of both path, place and frame are combined that make the street such a vital element in one's perception and urban identity (Oktay 2002). In reference to Fortuin & Van der Graaf (2006) One can also interpret it as the shared characterising denominator (dutch: *gemeenschappelijk noemer*) which links the numerous and diverse identities of an urban population. To be more specific, it is the social interface in which identities interact, be it actively or passively, and through which they change, grow, shift and adapt. As such, the public framework of streets play a key role in 'identity dynamics' (Fortuin & Van der Graaf 2006).

Streets however also play a vital role in the image of the city as a whole. As Jane Jacobs (1992, p. 29) puts it: “Streets and their sidewalks, the main public places of a city, are its most vital organs. Think of a city and what comes to mind? Its streets. If a city's streets look interesting, the city looks interesting; if they look dull, the city looks dull”. The importance of this image forming quality of streets and its role in the orientation of people is also stressed by Kevin Lynch (1960) through various mental mapping sessions among city inhabitants.

2.3 Recommendations concerning streets

According to Oktay (2002) the primary quality of a street can be narrowed down to the handling of volume; the mood or character is created by the architecture. The role of the architecture or building is also included in what Oktay considers the optimum definition for the street: “An enclosed, three-dimensional space between two lines of adjacent buildings” (Oktay 2002, p. 264). As he goes on to state, “a sense of place in a street design is best achieved if the spatial volume defined by the frontages is perceived as the positive form, the figure seen against the general ground of the surrounding architecture”.

However, the observation is also made that it is exactly these vital characteristics that are increasingly lacking in present day streets. As Oktay (2002, p. 264) puts it, “the street is generally lost and reduced to a means of traffic, lacking three-dimensional qualities, as a consequence of the

current scattering of the buildings and the increasing motorised traffic [...] and the square, Lynch's “distinct and unforgettable place”, has become a traffic island.”

2.4 The role of squares

The square is characterised as the most distinct element of the urban space (Oktay 2002).

Paul Zucker (1959, p. 1) also describes the square as “a psychological parking place within the civic landscape.” As such squares can also be considered as goals for movement in the larger public framework, that is formed by the streets. Accordingly, squares should also induce a stronger sense of place than streets.

Following Oktay's earlier definition of the street, one can define a square by using the same formal factors, but in different proportions to one another. To be more specific, the buildings should form a continuity around the space, so as to emphasize the ‘placeness’ of the square's surface, as Relph would state. The ‘placeness’ of a square should however not be considered as a quality entire unto itself, which merely emphasizes the square. Oktay (2002, p. 264) states, the dimensions of the square should also be such that it “provides the necessary perspective in which to admire the main buildings of the town, whose functions as physical and psychological ‘landmarks’ are thereby accentuated.”

As such, although the squares and streets share the characteristics of placeness, the square should be considered as a place on a greater urban scale (Oktay 2002). In reference to Unwin (1909) one can also explain the importance of the square through its conceptualization as a centre in the larger frame of the streets. According to Unwin such a view corresponds to the needs to emphasize some parts of a composition and subordinate others.

The relevance of properly addressing this human desire for structure is also discussed at length by Christopher Alexander (1972).

At this point however it suffices to state that there is more to becoming familiar with a place than merely walking through its streets and squares Oktay (1998). One needs also to address the way in which an inhabitant approaches the vast public platform from a local, and even private, point of view. The key to doing this is the development of “locally appropriate places” (Oktay 1998).

3 Locally appropriate spaces:

3.1 Relevance of the neighbourhood

Considering the local urban context, or ‘the appropriateness of places’, the neighbourhood can be seen as “the identifying symbol both for the evaluation of the city, and for the new urban extensions, [...] it is also fundamental for sustainable development” (Oktay 1998).

Moughtin (1996) also states that a creative design response to the context of the neighbourhoods, by

strengthening them, can heighten local distinctiveness and create memorable places; places that are for man, if you will (Relph 1976).

As such, how to give a neighbourhood its own physical identity and how to make it a place with its own character, distinct from other places, becomes the first challenge in the design of neighbourhoods (Oktay 2002).

Comparable to the issue of identity, before one can act, it is first necessary to define the actual neighbourhood. This can be done in a number of ways.

3.2 The typological analysis

A first method is that of the typological analysis.

Following Benevelo's (1968) discourse, one finds the neighbourhood as a basic urban residential type which combines place and activity. It is related specifically to a unique urban identity, different from the entire city. Benevelo (1968, p. 732) also considers the neighbourhood "a modern conception", which is "part of the modern architectural/urban effort to accommodate contemporary residential needs by the mediation of scale between the single house and the entire city."

As such, one can see the neighbourhood as a unit onto itself, an area which is designated primarily to enable governmental and organisational control.

3.3 The neighbourhood as shared characterising denominator

More recent approaches to the concept of the neighbourhood, such as practised by Kallus & Law-Yone (1997) take certain themes as the ordering elements for the understanding and intervening in a neighbourhood. Examples of such ordering element are healing, welfare, association, order participation, meaning and identity. With respect to the identity element, the neighbourhood is not seen merely as means for participation, but as a vehicle for strengthening the bonds between the residents and those between them and their environment. As such, the neighbourhood becomes the shared characterising denominator in the complex and varied structure of identities. In a sense the neighbourhood also becomes a mediator through which planners can address the real needs of the residents (Oktay 2002).

3.4 The complexity of the neighbourhood

However, as is warned by Christopher Alexander (1972), the task of designing for a neighbourhood community and its respective identity is not one to be underestimated. In his work "A City Is Not a Tree" Alexander clarifies on this view by discussing various projects, among which Ruth Glass's redevelopment plan for the city of Middlesbrough, England.

As Alexander explains, in essence, what Glass proposed was a division of the city into 21 separate

neighbourhoods, by determining where the sharpest discontinuities of building type, income and job type occur. Having determined these 21 neighbourhoods, Glass continued to ask the question: 'If we examine some of the social systems which actually exist for the people in such a neighbourhood, do the physical units defined by these various social systems all define the same neighbourhood?' In other words, do the social processes correspond with the neighbourhood edges determined by Glass's research? The answer to this question was *no*.

As Alexander explains, all the social systems that were examined by Glass proved themselves to be a nodal system. To be more specific, the social systems, be it a elementary school, public school, youth club, post office or greengrocers, functioned as central nodes to which specific users were attracted. This relationship between nodes and user groups is also visualised in the picture below.

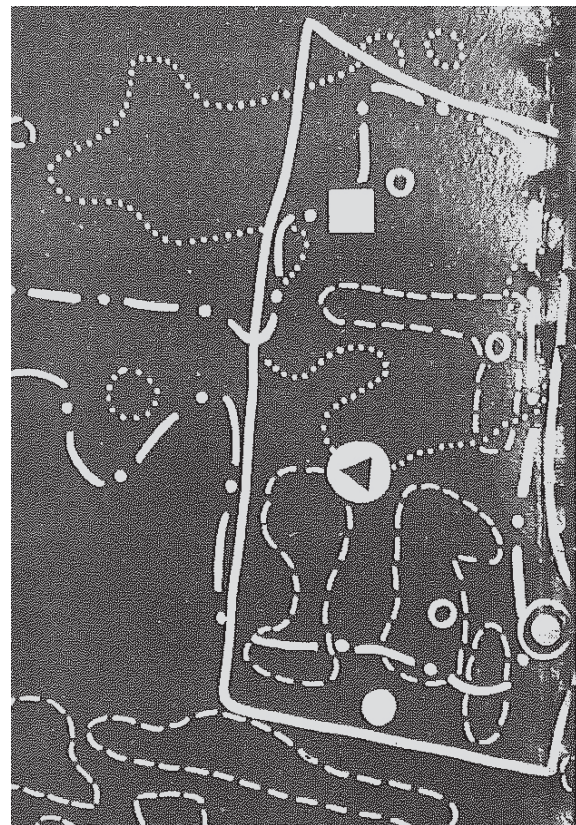
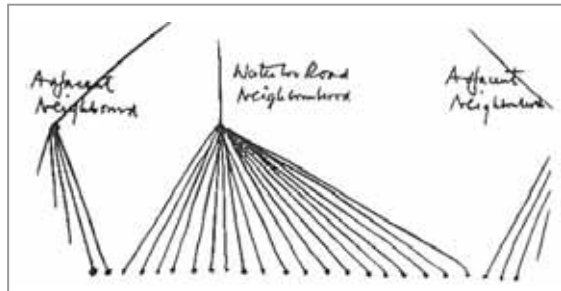


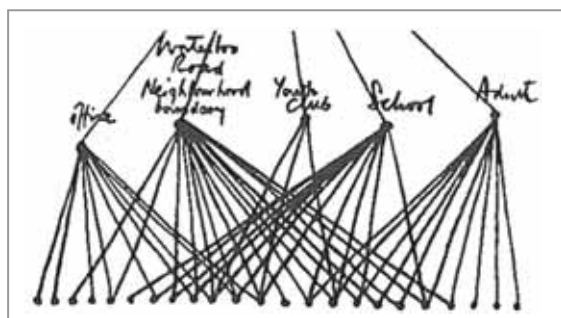
Illustration 1; Middlesbrough, Waterloo Road neighbourhood, England (Alexander 1972, p. 415)

The crucial elements of this image that needs to be recognised are the Waterloo Road neighbourhood, represented by the continuous white line; the various solid icons representing the social systems; the dotted, dashed and encircled areas representing the user groups. What is immediately visible in this image is that the user groups do not directly coincide with their respective nodes. In addition various groups are also overlap each other, while in other cases they are not even part of the neighbourhood zone in question.

Thus, as Alexander states, the case of Middlesbrough perfectly visualises the complexity one faces when designing for the neighbourhood. In other words, like a city is not a tree, nor are neighbourhoods strictly determined areas, or 'containers', which function as a perfectly ordered, tree-like scheme, nor should one try to make them as such (Alexander 1972).



The new tree-like scheme for Waterloo Road as suggested by Ruth Glass (Alexander 1972, p. 415)



The actual semi-lattice shaped structure of Waterloo Road as found by Christopher Alexander (Alexander 1972, p. 415)

4 Places and globalisation

4.1 The ongoing process of globalisation

As can be concluded from previous chapters, places, be it streets, squares or neighbourhoods, play a vital role in urban identity. Fortuin & Van der Graaf (2006) call this approach to urban identity the 'space of places'. In addition to the 'space of places' approach, and as a reaction to the ongoing processes of globalisation, Castells (1996) introduced a new concept to approach urban identity.

In this new concept, called the 'space of flows', it is not so much the places, but the flows (of people, finances, images, products, etc.) that determine the image of a city. As such, Fortuin & Van der Graaf conclude that the 'space of places' approach loses dominance to the 'space of flows'. This impacts a variety of urban process, among which the processes of urban identity or 'identity dynamics' (Fortuin & Van der Graaf 2006).

The process of globalisation is also extensively researched by John Urry (2003), who quotes Rifkin (2000): "... [C]ontemporary 'science' no longer sees anything 'as static, fixed and given'. The observer changes that which is observed, apparent

hard-and-fast entities are always comprised of rapid movement, and there is no structure that is separate from process. In particular, time and space are not to be regarded as containers of phenomena, but rather all physical and social entities are constituted through time and through space." (in Urry 2003, p. 7) Following this quote, there are various superficial similarities to be discovered between 'identity dynamics' and the process of globalisation, in terms of complexity. As Urry however goes on to state, globalisation should not be interpreted as an additional layer over that of the city, region or nation. Globalisation changes the very nature of all that is subjected to it, be it processes of economical trade or those of 'identity dynamics' (Urry 2003). As such, Urry also states, the global situation becomes one that is irreversible and increasingly complex: Small changes result in large consequences, whereas intensive exertions produce little to no result. Fortuin & Van der Graaf sketch an additional image of this global situation as a staging ground in which various processes, occurring parallel to each other, can also influence one another in an untraceable fashion. Various phenomena can play a role in different occurrences while the geographical distances no longer seem to play a role. Consequently, according to Urry, it is also no longer possible to make educated predictions on how the current situation is to develop in the future, be it socially, economically or other wise. In correspondence to Castells' 'space of flows', Urry describes this complex situation as a 'flowing reality'.

4.2 The relevance of places in light of globalisation

Discussing the dominance of 'flows' over 'places' it seems that in the light of globalisation, places (streets, squares and neighbourhoods) lose any relevance they had in the sense of urban identity. However, according to Fortuin & Van der Graaf (2006), this is not the case. As they continue to postulate, it is exactly the distinct local qualities that make places functional for global developments.

An example is given in the form of a 'footloose' company: In the vast global network there are various places that can accommodate the company's pragmatic needs. Such places become interchangeable from the company's point of view.

That which distinguishes the various locations becomes a means for places to distinguish themselves and compete with other places. And it is exactly the identity of places that provide this unique signature (Van der Wouden 2004).

As such, the relevance of a place, and consequently the relevance of urban identity, not only persists under globalisation, but also goes beyond the social aspect of a city, entering the realm of economics.

Such an increase in the role of urban identity hints at the changes in its nature, as suggested by Urry. Droogers (2001) elaborates somewhat further on this issue of the changing nature of urban identity. According to him, one of the biggest effects globalisation has on urban identity is that it changes in the way people position themselves in society. More specifically, do to ever faster shifts in the context of a persons life, people are increasingly confronted with different identities. People are constantly required to re-evaluate their position do to changes in their context. According to Doogers, the result is that identities become more fluid. This eventually also leads to the breaking up of traditional group up to the point of the individual (Fortuin & Van der Graaf 2006). As Fortuin (1998) also describes it, the issue of 'dealing with different ethnicities, religions and other groups' is broadened to 'dealing with different individuals'.

As a result, the city, as a physical and geographical enclosed 'container' (or place) in which events take place, fades in its relevance towards urban identity (Fortijn & Van der Graaf 2006). The city continues to become a node in a complicated network of various flows: financial, products, tourism, etc. As Fortuin & Van der Graaf and Van der Wouden state, the identity of a specific place starts to fulfil a new function. It becomes the distinguishing element, through which to promote the nodes, as it were. And public spaces, such as streets and squares, the vital elements in the development of identity, become the calling cards of the city and meeting places of the global community.

5 Recommendations

5.1 Recapitulation

As has been discussed in chapter two, public spaces, in the form of streets and squares, play a vital role in the forming of urban identity (Oktay 2002). Accordingly, recommendations have also been made for these vital element of urban identity. This is also the case for the neighbourhood, which can be considered "the identifying symbol [...] for the evaluation of the city" (Oktay 1998). Therefore this part of the paper will focus on recommendations concerning the previous chapter.

As one can recall, in this previous chapter, Fortuin & Van der Graaf (2006) and Van der Wouden (2004) discuss the changing role of urban identity as one that increasingly fulfils the task of 'calling card' of the city.

Fortuin & Van der Graaf conclude that, apart from the increasing complexity, in itself this development does not necessarily have a negative impact on society. However, in addition, they also conclude one should not develop an area based mere on this 'calling card' aspect of places. As Fortuin & Van der Graaf state, developing a place, merely as an

physical and spatial task one easily underappreciates the 'space of flows' and increased complexity that accompanies it.

Jane Jacobs (1992) also discusses such urban interventions as being some of the most destructive incursions in urban societies.

5.2 Acknowledging and mapping flows

As such, Fortuin & Van der Graaf also continue to suggest two changes in the approach of urban identity. The first is a change in the way specific projects are worked out. At the moment, they conclude, this approach is still to much oriented on places as specific bordered areas. This orientation is to be shifted more to that of the 'flows' that pass through a place, seen as it is the flows that have a great impact on the place. Fortuin & Van der Graaf also conclude that, in order to address the flows, new methods need to be implemented. Possible methods are also discussed by Alexander (1972) and Lynch (1960) who discuss the approach of involving the citizens themselves and evaluation how they see the city, how they view their own urban identity. A specifics tool that is discussed is for instance the mental map. The best scale on which to work out such a map is that of the neighbourhood (Oktay 2002). In reference to Alexander, it needs to be explicitly noted that the exact borders of the neighbourhood in question are of subordinate relevance.

5.3 Moving with the flow

The second change that is deemed necessary by Fortuin & Van der Graaf corresponds with Alexander's assessment of human beings as having a mental need for structure and control. As Fortuin & Van der Graaf explain, such a desire for structure not only undermines the complex social structures which result from globalisation, but it also undermines relatively less complex structures of the more locally oriented urban identities. As such, professionals dealing with the issues of urban development and regeneration are advised to detach themselves form such static notions of control and order. As Fortuin & Van der Graaf put it, the key to utilizing urban identity is to move with its flows, coming to understand it and only then addressing it.

Acknowledgements

I want to express my greatest gratitude towards my Studio mentor Luisa Calabrese for her encouragement in reviewing the issue of urban identity; Dr.ir. Machiel van Dorst and ir. Ruth Höppner for sharing their critical view on the matter of urban identity and I want to thank Dr. Ana Maria Fernandez-Maldonado and Dr.ir. Remon M. Rooij for their guidance in writing this paper.

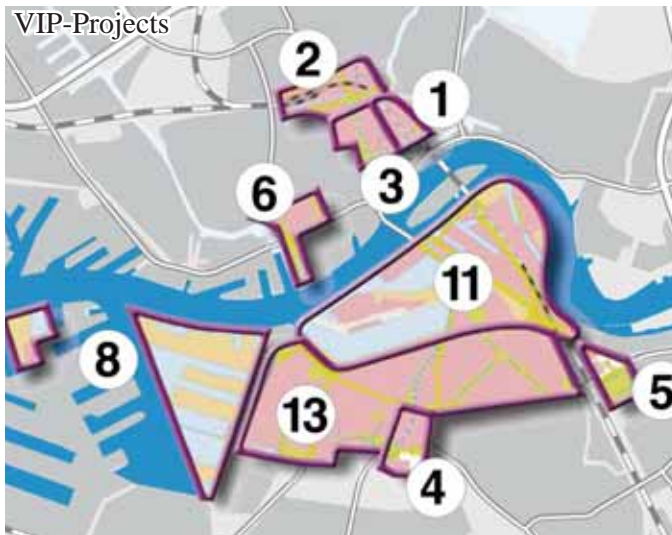
Bibliography

- Alexander, C. 1972, 'A City Is Not a Tree', in G. Bell & J. Tyrwhitt (ed.), *Human Identity in the Urban Environment*, Butler & Tanner Ltd., London, pp. 401-428.
- Barnett, J. 1982, *An Introduction to Urban Design*, Harper & Row, New York.
- Bell, G & Tyrwhitt, J (ed.) 1972, *Human Identity in the Urban Environment*, Butler & Tanner Ltd., London.
- Benevolo, K. 1968, *The History of the City*, Scolar Press, London (1968).
- Castells, M. 1996, *The Rise of the Network Society*, volume 1 of the trilogy, The Information Age: Economy, Society and Culture, Blackwell, Oxford, pp. 407-459.
- Doogers, A. 2001, 'A Social Science View', paper prepared for the workshop on *Religion, Conflict and Reconciliation*, Amersfoort, 30 March – 2 April.
- Fortuin, K. 1998, 'Sociale processen en sturing', in W. Schakenraad, G. Hettinga, E. Plember, A. Raspe, K. Vos (ed.), *Dynamiek in drievoud: Onderzoek voor burgers, instellingen en overheden*, Jan Van Arkel/Verwey-Jonker Instituut, Utrecht, pp. 179-200.
- Fortuin, K & Van der Graaf, P 2006, *De stad verhaalt van de stad: Rotterdamse lokale identiteit en cultuur als hulpbron*, Verwey-Jonker Instituut, Utrecht.
- Jacobs, J 1992, *The death and life of great American cities*, 2nd edn, Vintage Books, New York.
- Kallus, R. & Law-Yone, H. 1997, 'Neighbourhood: the metamorphosis of an idea', *Journal of Architectural and Planning Research*, vol. 14, no. 2, p. 107.
- Lynch, K 1960, *The Image of the City*, M.I.T. & President and Fellows of Harvard Collage, U.S.A.
- Lynch, K 1981, *A Theory of Good City Form*, M.I.T. Press, Cambridge.
- Madanipour, A. 1996, *Design of Urban Space*, Wiley, New York.
- Moughtin, C. 1992, *Urban Design: Street and Square*, Butterworth Architecture, Oxford.
- Moughtin, C. 1996, *Urban Design: Green Dimensions*, Butterworth Architecture, Oxford.
- Norberg-Schulz, C. 1971, *Existence, Space and Architecture*, Studio Vista, London.
- Oktay, D. 1998, 'Urban spatial patterns and local identity: evaluations in a Cypriot town', *Open House International*, vol. 23, no. 3, pp. 17-23.
- Oktay, D 2002, 'The quest for urban identity in the changing context of the city: Northern Cyprus', *Cities*, vol. 19, no. 4, pp. 261-271, viewed 8 march 2010, <<http://sciencedirect.com/>>.
- Pixten, R. & Verstraete, G. (ed.) 1998, *Cultuur en Macht: over identiteit en conflict in een multiculturele wereld*, Houtekiet, Antwerpen.
- Relph, E 1976, *Place and Placelessness*, Pion, London.
- Unwin, R. 1909, *Town Planning in Practice*, Fisher Unwin, London.
- Urry, J. 2003, *Global Complexity*, Polity, Cambridge.
- Van der Wouden, R. 1999, 'Gestalten van stedelijkheid: Een verkenning van veranderingen in de openbare ruimte', in R. van der Wouden (ed.), *De stad op straat: de openbare ruimte in perspectief*, Sociaal en Cultureel Planbureau/Elsevier, Den Haag, pp. 17-37.
- Zucker, P. 1959, *Town and Square*, Oxford University Press, London.

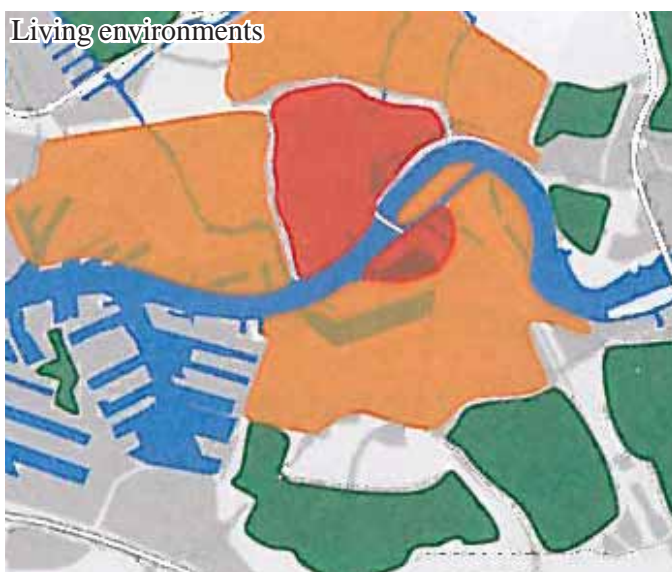
Research: Greater Urban context

Sub-Question 1:

What are the future requirements that the neighbourhood of Feijenoord needs to meet in the spatial and social context, with respect to the Rotterdam city-vision?



source: Stadsvisie Rotterdam, 2030



source: Stadsvisie Rotterdam, 2030



source: Stadsvisie Rotterdam, 2030

Stadsvisie Rotterdam / City-Vision Rotterdam 2030:

To answer this first sub-question, a review is being made of the city-scale development plans as described in the City-Vision Rotterdam 2030. This vision consists of 13 so called VIP-zones, or Very Important Project zones. As the name suggests, the municipality's planning agencies consider these zones as priorities in development. As such, the plans for these zones spearhead all other developments in the city.

In order to get a better understanding of what this implies for Feijenoord, the focus of the evaluation will be on zone 11, of which the neighbourhood is a part.

Viewing zone 11 in the context of the greater City-Vision 2030, in terms of housing environments, the area is designated as an area for 'peaceful urban living' as opposed to the nearby Kop van Zuid which bears the label 'central urban living'.

Housing is also considered an essential means by which to solve the imbalance in the city's workplace-workforce relationship. In the following chapters it is also discussed what this will imply for the neighbourhood of Feijenoord.

The City-Vision 2030 however goes far beyond the issue of housing. Examples are the issue of traffic/connectivity and environment.

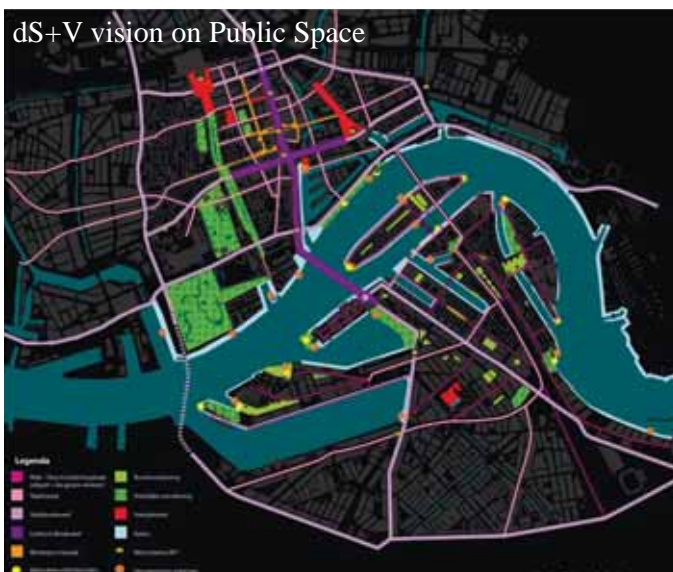
For the specific approaches to these and other issues, reference is made to the actual City-Vision 2030.



source: Stadsvisie Rotterdam, 2030



source: visie Kop van Feijenoord



source: visie Kop van Feijenoord



source: visie Kop van Feijenoord

Vision Kop van Feijenoord:

The plans which effect the neighbourhood of Feijenoord however go further then merely the large scale of the City-Vision 2030.

A specific developmentplan concerning Feijenoord has also been drawn up, the Vision Kop van Feijenoord. As of yet, this vision is still being considered a concept. Nonetheless, preparations for its development are already underway in the form of evictions, demolishments and the like.

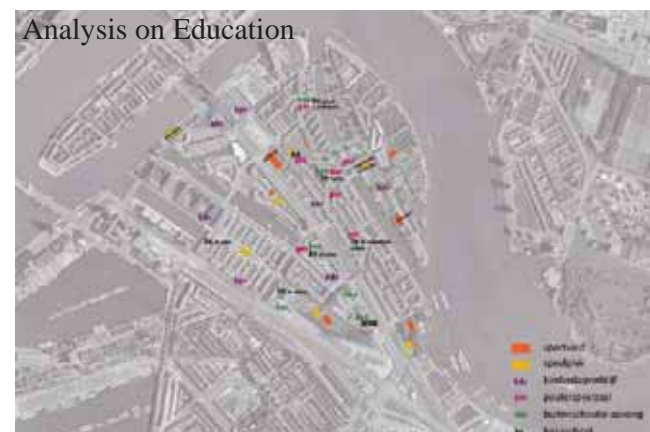
Before one continues, it should be noted that it is not the intent of this specific subquestion to determine if the propositions made by the Vision Kop van Feijenoord are either 'good' or 'bad' in light of urban identity. Such an answer can only be given with addition of research done in the following sub-questions. As such, this subquestion will evaluate the Vision Kop van Feijenoord based on its own criteria:

1) Framework of development, 2) Spatial and Programmatic criteria, 3) Plandescription, 4) Program. For specifics on these criteria, reference is again made to the actual vision.

1) Framework of development:

Concerning proposals for development, the Vision Kop van Feijenoord sets up a framework that makes a distinction into various sub-visions, being: the City-vision (discussed earlier); the Neighbourhood-vision; Housing-vision; Recreational and Educational Vision; Vision Economical dev. Entrepot-area; and Vision on public space.

In terms of Public space, for instance, a special Stylecommittee (2007) is setup to evaluate the neighbourhood and propose interventions. Such interventions concern various aspects of the neighbourhood: from greenstructures and waterfronts, to the connectivity of the area (as visualized in the images to the left).



source: visie Kop van Feijenoord

2a) Spatial criteria:



source: visie Kop van Feijenoord

Concerning the spatial criteria, specific goals that have been laid out for Feijenoord are:

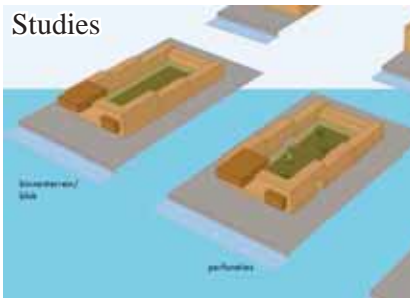
- The addition of new housing blocks
- Maximum utilization of icons on the Kop van Feijenoord
- A contrast with the Kop van Zuid
- Strengthening of the internal qualities of Koningshaven
- Offering space to new facilities

To this end, various reference project are also cited; a study is done of different building typologies that can contribute in meeting the set goals; and the intended restructuring of the public space is stated:

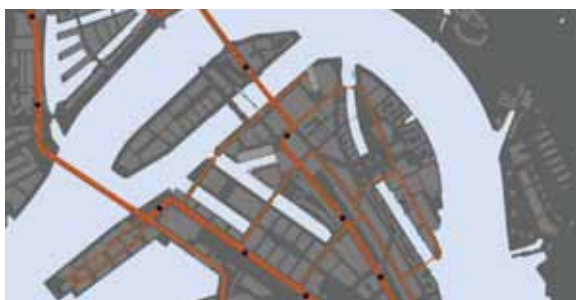
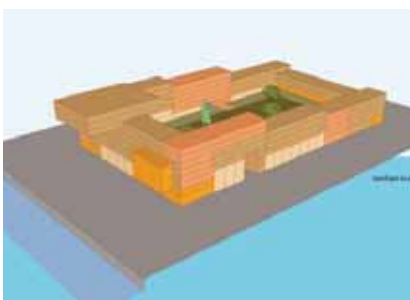
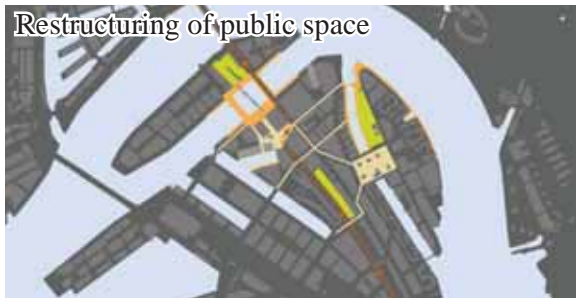
Desired result



Studies

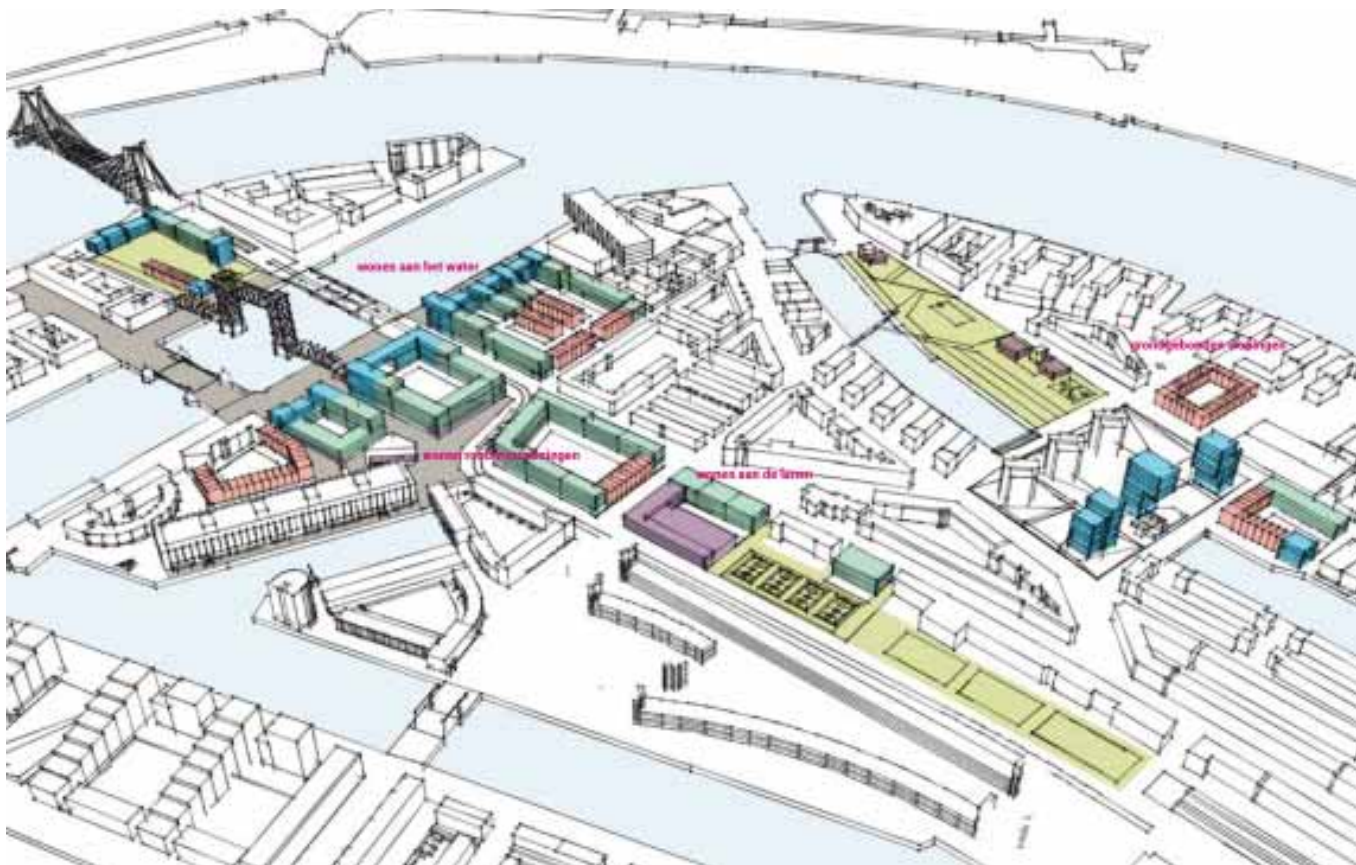


Restructuring of public space



source: visie Kop van Feijenoord

2b) Programmatic criteria:



source: visie Kop van Feijenoord

Concerning the programmatic criteria, a distinction has been made in criteria for: Housing environments, Facilities and Job opportunities.

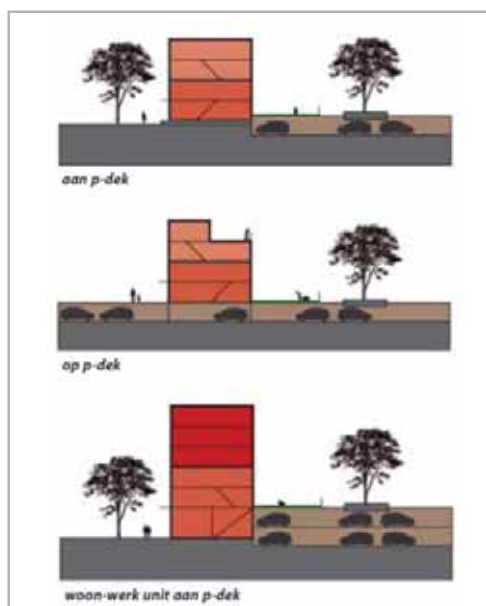
The organisation of the first, the housing environments, can be viewed in the above picture, in which:

- Blue = Housing on the waterfront;
- Green = Housing near facilities and large boulevards;
- Red = 'Groundconnected housing' (dutch: *grondgebonden*)

According to the KvF vision, the facilities are to be clustered in various themes, as is also depicted in the lower left picture. The lower right pictures visualize the various methods by which such facilities can be included in the development plans.



source: visie Kop van Feijenoord



3) Plandescription:

In the Plandescription of the vision KvZ and additional step is made towards specific on site developments in the neighbourhood. Two main clusters can be determined from the proposed interventions. The first is the area located near the Willemsbrug and the Hef. This area can also be designated as the actual 'Kop' of Feijenoord. The second cluster is located more inward to the neighbourhood.

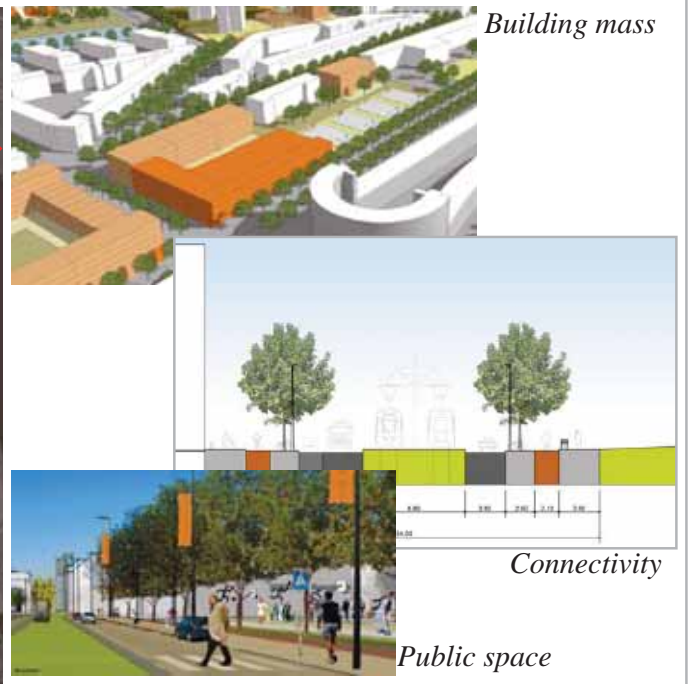
At this point it should be noted that the focus of the graduation project is more towards this second area and the southern part of cluster 1.

Concerning the proposed interventions, a distinction is made in 3 categories, being: Building mass, Public space and Connectivity.

Development cluster 1:



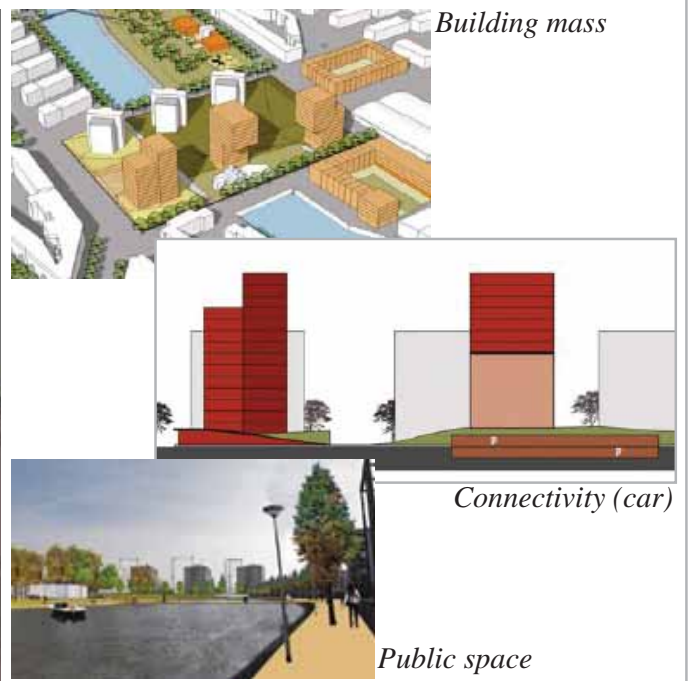
source: visie Kop van Feijenoord



Development cluster 2:



source: visie Kop van Feijenoord



4) Program:

The program that is to be included in Kop van Feijenoord is one of a wide range:

Housing, parking, commercial infill of plints, recreational facilities and sports, education.

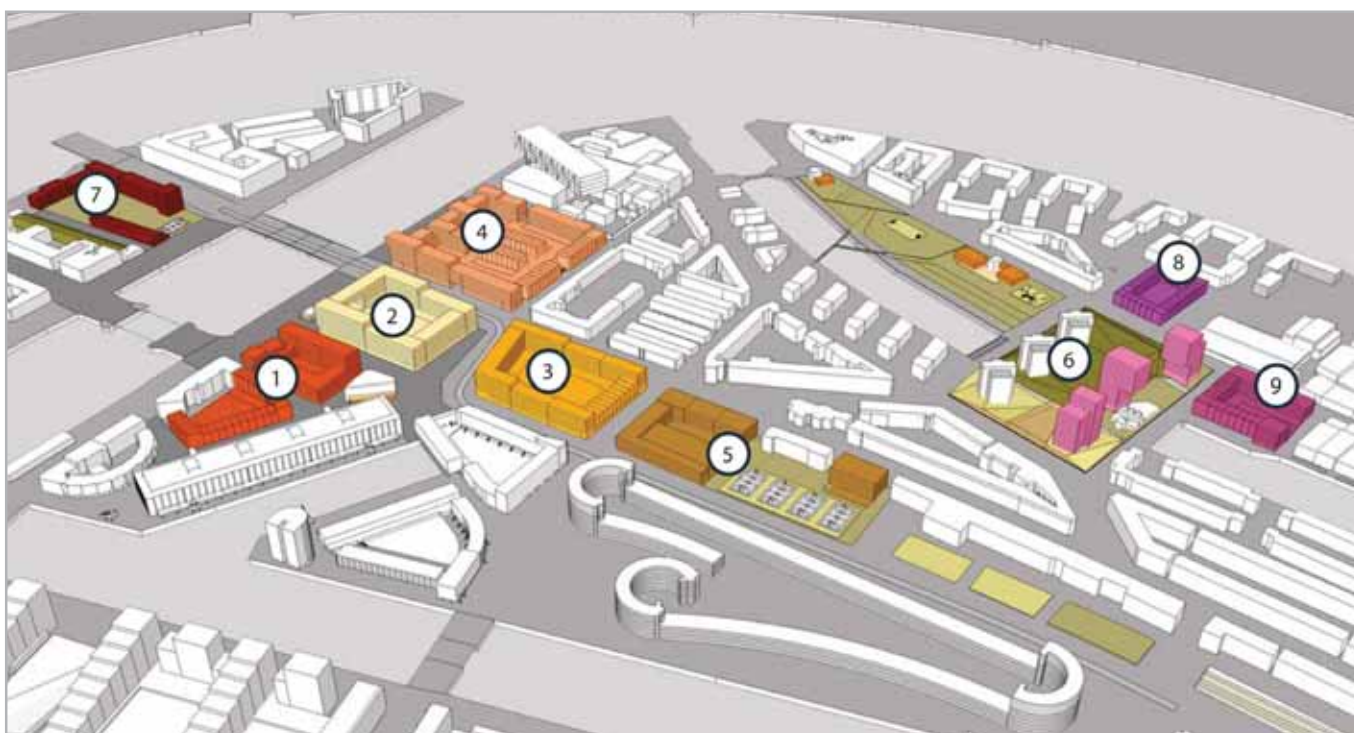
When it comes to the specifics however, no further explanation is given. This is especially the case for commercial infill.

This is not surprising, seen as the developmentplan is still in its vision-fase.

Nonetheless it is striking that the concept does already include a overview in the amount of housing.

This is most likely a result of the greater City-Vision, which also largely concerns the development of new housing for high-income, high-educated people.

Thus, further study of both these visions and cross-referencing to the data collected in the following sub-question should point out if such developments form the most effective course of action, when it concerns the current population of Feijenoord.



source: visie Kop van Feijenoord

Indicatief programma				
aantal woningen deelgebied	totaal	aandeel grondgebonden	%	
1	150	30	20	1. Stieltjesblok
2	200	18	9	2. Hefblok
3	190	36	19	3. Entrepotblok
4	365	76	21	4. d'Oranjeboom
5	57	0	0	5. Kop Rosepark
6	245	0	0	6. Persoonsdam
7	150	32	21	7. Noorderreiland
8	33	33	100	8. Zinkerblok/Nijverheidsstraat
9	50	13	26	9. Plekstraat
totaal aantal woningen		1440		
totaal grondgebonden woningen		238	17	

source: visie Kop van Feijenoord

**Research:
Inherent Identity;
People and Program**

Sub-Question 2:

Which type of people exactly make up the population of the neighbourhood Feijenoord? (And why are they called disadvantaged?)

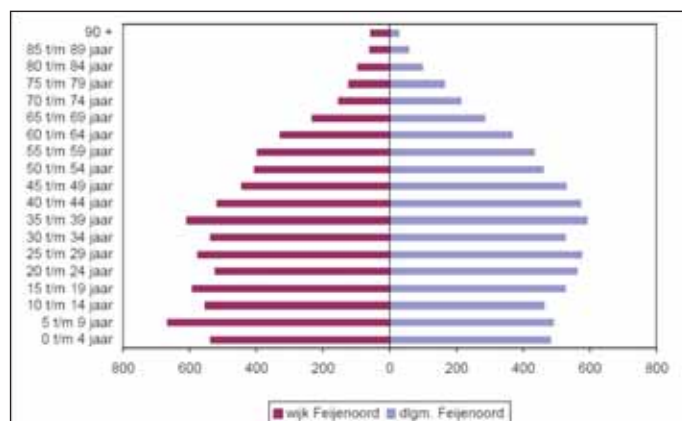
COS Report; Neighbourhood analysis for Feijenoord:

In order to formulate a tailor made answer to sub-question 2, one can turn to various sources of information, among which: Rotterdam DATA (the statistics database of Rotterdam) and GisWeb 2.0 (a spatially oriented database of the city, including demographics, facilities, etc.).

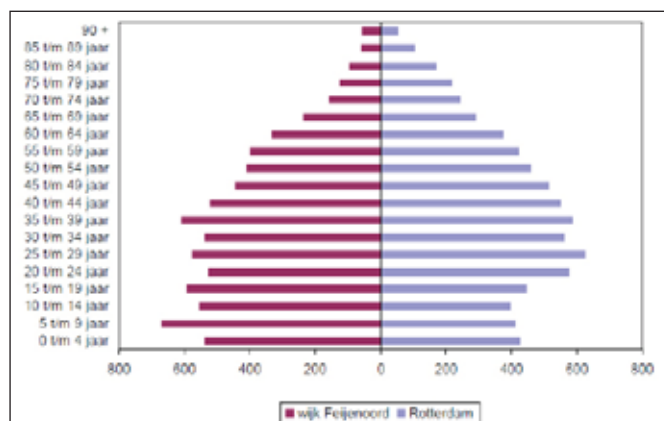
However, seen as both these sources provide an over-whelming amount of objective data, at this point in the thesis it would be more appropriate to discuss the findings of the COS-report (Centrum voor onderzoek en statistiek).

This COS-report utilizes both of the above mentioned sources, in combination with the Sociale Index, the Buurtsignalering and the (Jeugd)Veiligheidsindex, to provide a site-specific insight to the neighbourhood. As such, this part of the thesis will discuss the findings of COS. In addition reference is also made to 'De nieuwe belangstelling' (2011) a report developed within Veldacademie Rotterdam, which also provided a internship considering the graduation subject.

Demographic Characteristics



source: COS, buurtanalyse Feijenoord, may 2009



Potential Workforce

Leeftijd	wijk Feijenoord	digm. Feijenoord	Rotterdam
jonger dan 15 jaar	24%	19%	17%
15 t/m 64 jaar	67%	69%	69%
ouder dan 64	10%	11%	14%
Totaal	100%	100%	100%

Type of Households

Type huishoudens	wijk Feijenoord	digm. Feijenoord	Rotterdam
Een-persoons huishoudens	40%	43%	47%
Ongehuwd stel zonder kinderen	4%	6%	8%
Gehuwd stel zonder kinderen	12%	14%	15%
Ongehuwd stel met kinderen	2%	3%	4%
Gehuwd stel met kinderen	20%	18%	15%
Een-ouder huishouden	20%	14%	10%
Overig	2%	2%	1%
Totaal	100%	100%	100%

Ethnic composition

Etniciteit	wijk Feijenoord	digm. Feijenoord	Rotterdam
Suriname	15%	11%	9%
Ned. Antillen/Aruba	5%	4%	3%
Kaapverdie	4%	2%	3%
Turkije	28%	19%	8%
Marokko	15%	10%	6%
overig niet-westers	8%	9%	7%
autochtoon	17%	35%	54%
ov. EU_27 (2007)	4%	4%	6%
overig westers	3%	4%	5%
Totaal	100%	100%	100%

source: COS, buurtanalyse Feijenoord, may 2009

A first step towards understanding the neighbourhood can be taken by looking at its demographic composition. In doing so, a first characteristic that comes to light is the relatively young population.

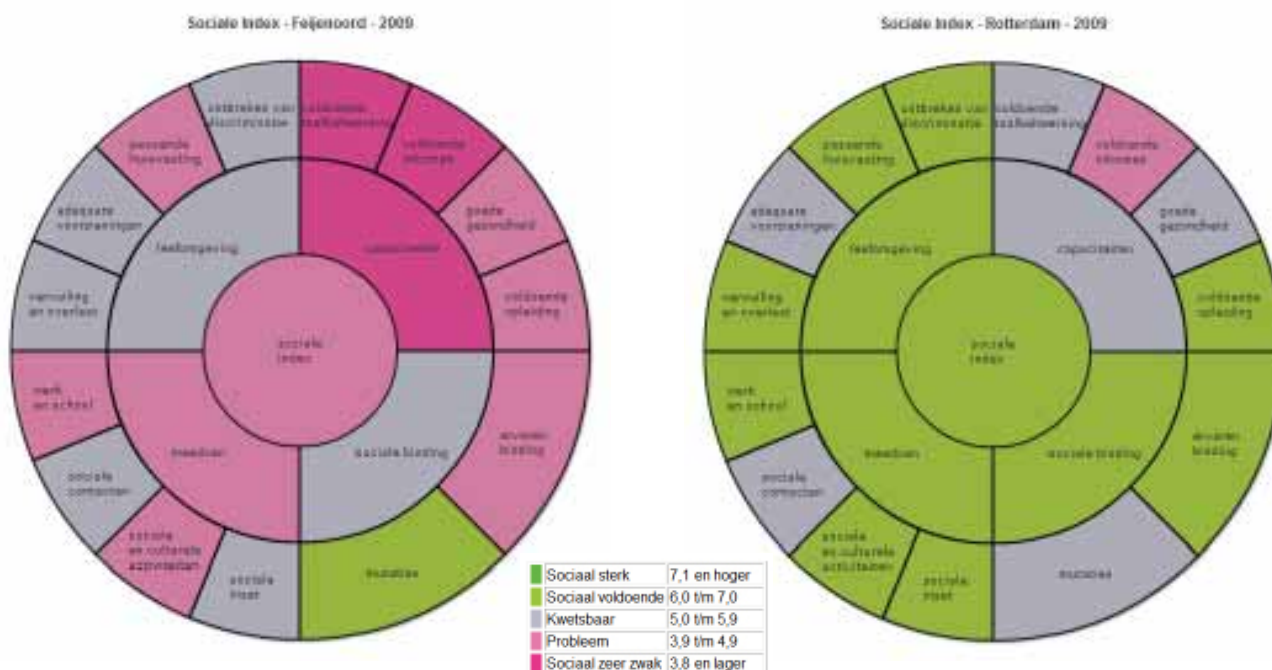
As is stated by COS, this offers a great potential for the city's future workforce.

Looking at the type of households, one can also find that (logically) a large part of the households has children. However, nearly half of these child bearing households also has only one parent. This is twice as much as in the entire city and 1,5 times as much as in the sub-municipality Feijenoord.

In comparison to the rest of the city, Feijenoord houses a large number of immigrants. A very large part (83%) of these immigrants is also of a non-western origin. The largest part is made up of Turkish immigrants, in addition also a large number of Moroccan and Surinam people inhabit the neighbourhood.

Sociale Index / Social Index

Moving on to the problems of the neighbourhood (left), one can view the Social Index to get a better vantage point. The problematic situation in the neighbourhood is immediately visible through the large red sections, as apposed to relatively greener diagram of the city (right).



source: COS, buurtanalyse Feijenoord, may 2009

Critical indicators

Of all these themes on which the neighbourhoods has a low score the COS singles out the theme's that play the largest role. Indicators of such decisive themes are also called 'Critical Indicators'. For the neighbourhood of Feijenoord these themes and indicators are:

Aspect	Thema's met prioriteit	Kritische indicatoren	Feijenoord	dlg Feijenoord	Rotterdam
Capaciteiten	Voldoende Inkomen	Percentage huishoudens met laag inkomen	52%	32%	20%
		Percentage uitkeringen 35-55 jaar	20%	16%	10%
		Percentage huishoudens die moeilijk rondkomen	36%	26%	17%
	Voldoende taalbeheersing	Percentage moeite met Nederlands	33%	24%	14%
Leefomgeving	Passende huisvesting	Percentage overbewoning	19%	14%	9%
		Tevredenheid eigen woning	4,5	4,9	6,4
Meedoen	Sociale en culturele activiteiten	Percentage uitgaan	44%	48%	56%
		Percentage cultuur	40%	46%	52%

Other problematic themes and indicators

Next to the above stated problems however, there are also other themes on which the neighbourhood scores extremely low. As such, these themes also (should) become focal points for the future developments:

Aspect	Thema's	Indicatoren	Feijenoord	dlg Feijenoord	Rotterdam
Capaciteiten	Voldoende opleiding	Percentage jongeren met startkwalificatie	52%	56%	68%
		Percentage bevolking zonder startkwalificatie	23%	25%	15%
	Goede gezondheid	Ervaren gezondheid en beperkingen 15-35 jaar	3,5	5,2	6
		Ervaren gezondheid en beperkingen 35-65 jaar	2,3	3,5	5
Meedoen	Werk en school	Percentage niet-werkende werkzoekenden	18%	15%	9%
Leefomgeving	Weinig vervuiling en overlast	Veilig	6,3	6,2	7,3
Sociale binding	Ervaren binding	Percentage familiariteit	44%	52%	60%

source: COS, buurtanalyse Feijenoord, may 2009

Summed up

Following COS's previous diagrams, one can now state that Feijenoord is a socially weak neighbourhood. On virtually all themes it scores lower than the average of Rotterdam.

The primary problem-themes are: the capacities of the inhabitants, de participation in the community, de living environment and the social connectivity to the neighbourhood.

The people are low-educated or haven't finished their education. Nearly half of the youngsters has no starters-qualification. This means that a large amount of the earlier discussed, potential workforce is actually missing the credentials to get highered for a job. In addition, the potential workworkforce in general also considers its own health to be relatively poor.

Another problem is also noted in the form of limited knowledge of the Dutch language. This again has a negative influence on the chances to find a job. Thus, a large part of the population also consists of non-working job-seekers. More than half of the inhabitants has a low income and the percentage of inhabitants on welfare is twice the average of the city.

With respect to the housing environment it is especially the need for adequate housing that forms an issue. There is a relatively large amount of overpopulation to be found (twice as much as the average of Rotterdam). Consequentially, the satisfaction of the inhabitants with their home is relatively low. In addition the neighbourhoods is also troubled by safety-issues.

Veiligheidsindex / Safety Index

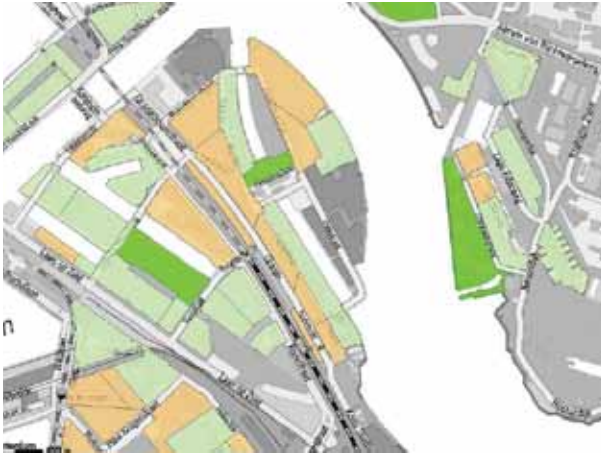
In terms of safety Feijenoord scores a 6.3. This is lower than the city's 7.3, which earns the neighbourhood the position of 'special attention-neighbourhood' (dutch: aandachtswijk). The graph below shows how the neighbourhood scores on various topics, in comparison to the scales of the sub-municipality and the city.

	diefstal	drugs	geweld	inbraak	vandalisme	overlast	schoon en heel	verkeer
wijk Feijenoord	veilig	veilig	veilig	probleem	aandacht	aandacht	aandacht	veilig
deelgem. Feijenoord	veilig	bedreigd	bedreigd	aandacht	veilig	aandacht	veilig	veilig
Rotterdam	veilig	aandacht	veilig	veilig	veilig	aandacht	veilig	veilig

As is visible, the neighbourhood's safety issues primarily concern the elements: burglary, vandalism, nuisances, and matters of orderliness. In the graph below, further specifics are stated concerning these safety issues. In the Jeugdveiligheidsindex (excl.) it becomes clear that youngster play a large role in these issues of safety.

Element	Indicator	Score wijk	Score stedelijk
	Tevredenheid met de eigen buurt	73%	80%
Diefstal (v)	Buurtprobleem fietsendiefstal	29%	18%
	Slachtofferschap diefstal vanaf de auto	41%	31%
	Slachtofferschap fietsendiefstal	8%	5%
Geweld (v)	Buurtprobleem geweldsdelicten	9%	4%
Inbraak (p)	Aangiften woninginbraak	17 aangiften	14 aangiften
	Aangiften inbraak in box/garage/schuur/tuinhuis	22 aangiften	7 aangiften
	Aangiften inbraak bij bedrijven/instellingen ⁷	175 aangiften	109 aangiften
	Buurtprobleem woninginbraak	26%	12%
Vandalisme (a)	Meldingen kleine buitenbranden	2 meldingen	1 melding
	Buurtprobleem vernieling	33%	18%
	Slachtofferschap vernieling	5%	3%
Overlast (a)	Meldingen burengerucht	31 meldingen	26 meldingen
	Buurtprobleem overlast van groepen jongeren	22%	14%
	Buurtprobleem dronken mensen op straat	8%	5%
Schoon en Heel (a)	Buurtprobleem vervuiling op straat	44%	33%
	Buurtprobleem vuil naast de container	43%	24%
	Buurtprobleem wildplassen	13%	9%
	Buurtprobleem vernield straatmeubilair	20%	8%

source: COS, buurtanalyse Feijenoord, may 2009



Buurtsignalering/ Neighbourhoodprofile

Buurtsignalering or Neighbourhoodprofile is the last tool that is utilized by the COS to provide a site-specific insight into Feijenoord.

Here the PPC-map (left) gives summary of a housing block's status through an overview of their *Potential Problem Cumulation*. The more dark-yellow a block is colored, the higher its PPC-value. It is immediately visible that a large amount of Feijenoord's blocks scores quite low. Slightly less than half of the blocks scores just higher than the city average (light-green). And only one small cluster scores far higher than the city average and is thus of significantly higher quality than the city-average (dark-green).



One can also continue to split the PPC overview up into its smaller inputs. It is then that the specific issues of Feijenoord become more visible.

A first step in this more specified overview can be the 'vacancy'-map (dutch: leegstand). As vacancies are visualized by red hatches, it becomes clear that there are virtually no vacant living spaces.

More specifically, at the time this map was made there was merely one housing block vacant due to evictions. In between the setup of the COS-report and the writing of this Progress Report, the block in question has also been torn down.



In addition to the issue of limited vacancies, it can be found that there is actually a problem of over-occupation of households in the neighbourhood. This was already indicated in previous sections. In this map however, we can now see the actual severity of this issue.

For, virtually all households suffer from overoccupation. Thus, this also forms an important issue in the neighbourhood's liveability and has a great impact on the earlier discussed Social Index.



As a final step one can also look at the exact location of the inhabitants which face specific challenges. In the map to the left, the example of the jobless job-seekers is visualized. Here one finds the largest concentration of this group along the the Oranjeboomstraat (western edge) and the Eastern edge of the neighbourhood. As such, any intervention concerning employment should also keep the spatial location and connectivity of this inhabitantgroup in mind.

source: COS, buurtanalyse Feijenoord, may 2009



source: Veldacademie, leefveldenanalyse Feijenoord, march 2011

Intermission; Livingspheresanalysis / Lifestylesanalysis:

Wonen	Economie, werk & inkomen	Veiligheid
Seniorenwoningen Verkoop Renovatie (gevel+) Sloop Toewijzingscriteria (inkomen min. 27.500 euro) Toewijzingscriteria (leeftijd max. 28 jaar)	winkelcluster supermarkt levensbehoefte spec. solitaire winkels bedrijven terrein bedrijf coffeeshops restaurant belhuizen financiële adv. terras / snackbar SoZaWe	Politiebureau OK-punten hangplekken
BELEID Seniorenwoningen Verkoop Renovatie (gevel+) Sloop Ontwikkelingslocaties	BELEID	BELEID

At this point in the research a large amount of data has been collected in order to answer subquestions one and two; respectively the goals of the municipality and the current status of the inhabitants.

As proposed earlier in the thesis, an intermission is included in the research-process, in order to combine these two datasets. This combination is also known as the leefvelden-analyse or lifestylesanalysis; a multilayered documentation method used by the Veldacademie Rotterdam that maps a neighbourhood based on: Housing, Economy/work/ income, Safety, Education, Healthcare, Residential Environment and Participation.

Additionally, this method also makes a distinction in the current status of the inhabitants (inventarisatie/SQ2) and the policy of the municipality (beleid/SQ1).

Onderwijs	Welzijn & Hulpverlening	Woonomgeving	Participatie & Vrije tijd
Schoolgebouwen: Leefstijl: Type: 0-4 K.d.v. 2-4 Voorscholen 4-12 Basisscholen 12+ V.O. 12+ Beroepsondw. Brede Scholen Samenwerking Intensieve samenw. bibliotheek e-centra	apotheek tandarts huisarts andere zorgvoorz. gesloten zorginstell.	toegankelijke hoven vuilcontainers papierbakken hondenuitlaatzones tramlijn buslijn spoorlijn metrolijn	wijkgebouw christelijke instelling islamitische instelling collectieve tuin sport & recreatie cultuur / evenementen bewonersorganisatie andere organisaties
BELEID Mogelijke locaties nieuwe school	BELEID	BELEID Nieuwe tramlijn (visie Kop van Feijenoord) Brug Koningshaven (visie Kop van Feijenoord) Parkontwikkeling	BELEID Nieuwe sportfaciliteiten Mogelijke locaties MFA

source: Veldacademie, leefveldenanalyse Feijenoord, march 2011

Lifestylesanalysis/Livingspheresanalysis, sub-layers:

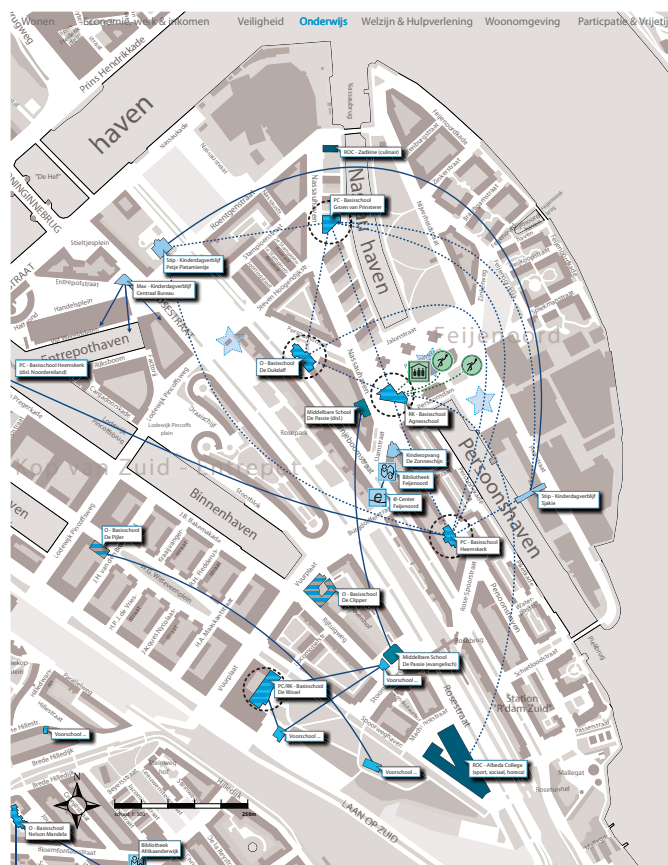
As one can probably deduce from the legend, the lifestylesanalysis can also be split up into its various sub-layers in order to provide a clearer insight into Feijenoord. In reference to the data collected in SQ2 one can now, for instance, review the issue of the healthcare and the low level of “experienced health” (map 4). We see that the neighbourhood has a relatively low amount of healthcare facilities. This leads to the hypothesis that the quantity of the healthcare facilities has a direct relation to the “experienced health”.

The detailed sub-layers however also suggest more complex relationships between various processes.

An example is the status of Residential Environment (map 7). As one can recall from SQ2, the neighbourhood scores relatively low when it comes to littering. This despite the numerous garbage bins, containers and other collections points.

As such a more indirect cause or relationship must exist. As explained in the initial chapters of the thesis (pp. 4-25) the hypothesis is that a lack of mutual connection between the inhabitants and a lack of connection to their neighbourhood causes these and other issues. A lack of urban identity, if you will. Thus, the research moves on to SQ3&4 in order to elaborate on this urban identity.

See also “De Nieuwe Belangstelling” (2011)!

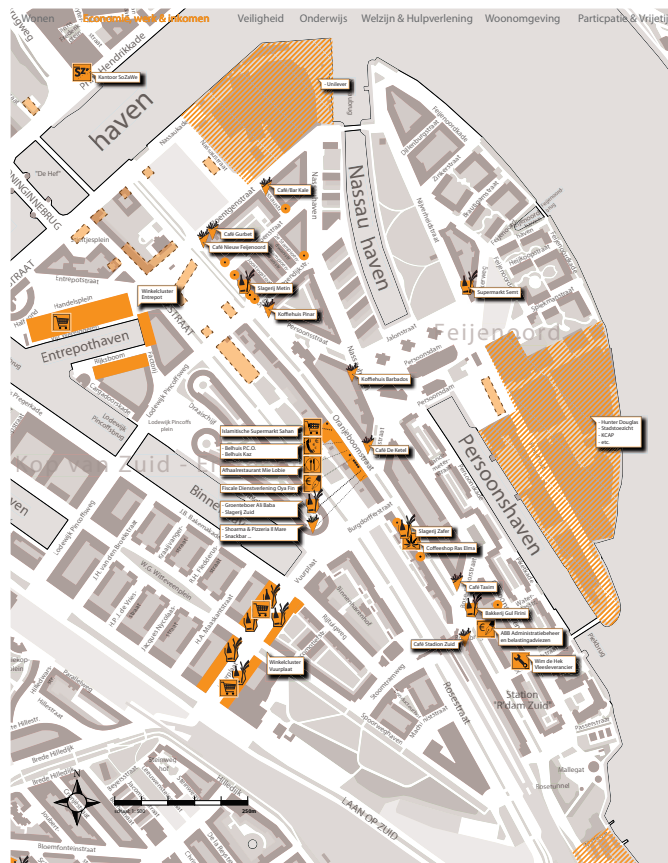


1) Education

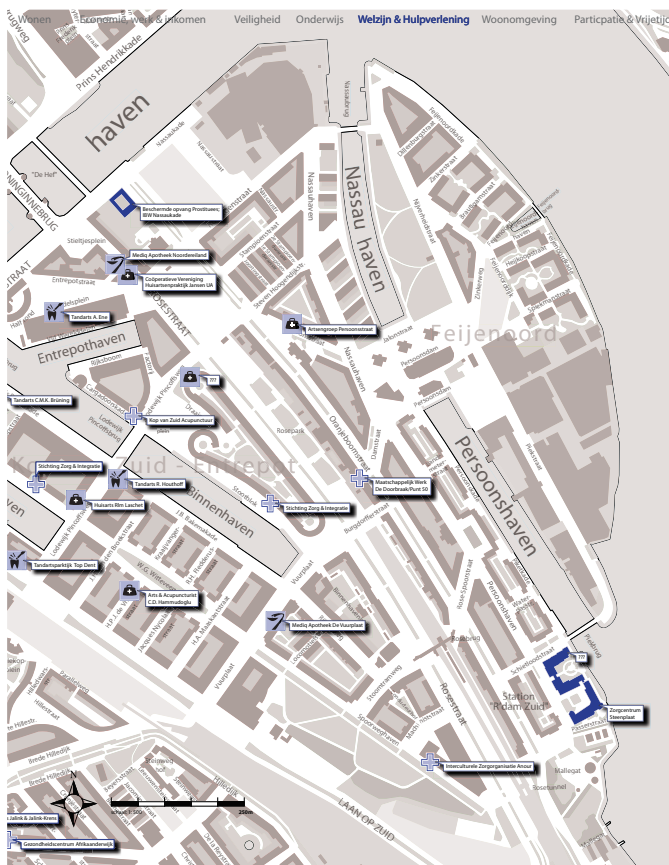


2) Housing

source: report “De Nieuwe Belangstelling”, march 2011



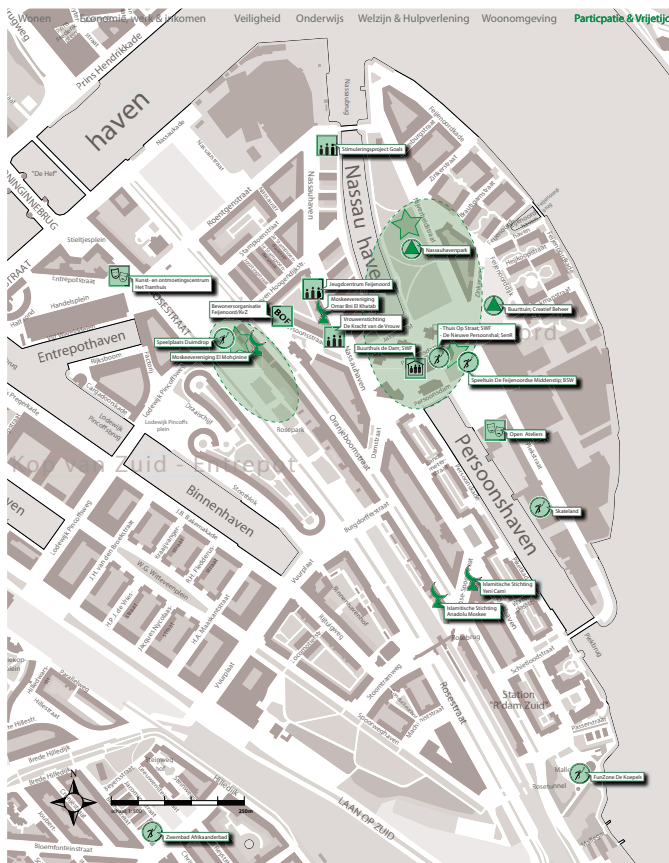
3) Economy/work/income



4) Healthcare



5) Safety



6) Participation/Recreation



7) Residential Environment

**Research:
Inherent Identity;
Program and Space**

Sub-Question 3:

What exactly is part of the culture of the disadvantaged groups currently residing the neighbourhood of Feijenoord?

Answering this subquestion enables one to shift the research into a more indept and quality-oriented phase in order to elaborate on the urban identity of the neighbourhood. To be more specific, the research shifts its focus to the more experiential value of the neighbourhood. As such, this phase of the research however contains an inherent complexity, in that it is of a more subjective nature.

Thus, in order to expound on the urban identity, one needs to approach the neighbourhood from a different angle. One angle of approach is that of the *Rijksmonumenten*, which states the areas or built works that are generally agreed upon as being characteristic for the city's urban character.

Another angle can be provided by literature works such as Fortuin & Van der Graaf's "De Stad Verhaalt van de Stad" (2006), in which a more up to date view on urban identity is provided.

Rijksmonumenten/National Monuments, Icons and Environmental structures

In terms of rijksmonumenten, the area of the 'Bend in the River' has a lot of valuable structures to offer:



In the case of the neighbourhood Feijenoord however there is only one national monument to be found. "Het pand van Waaning" (top right).



source: <http://www.top010.nl>



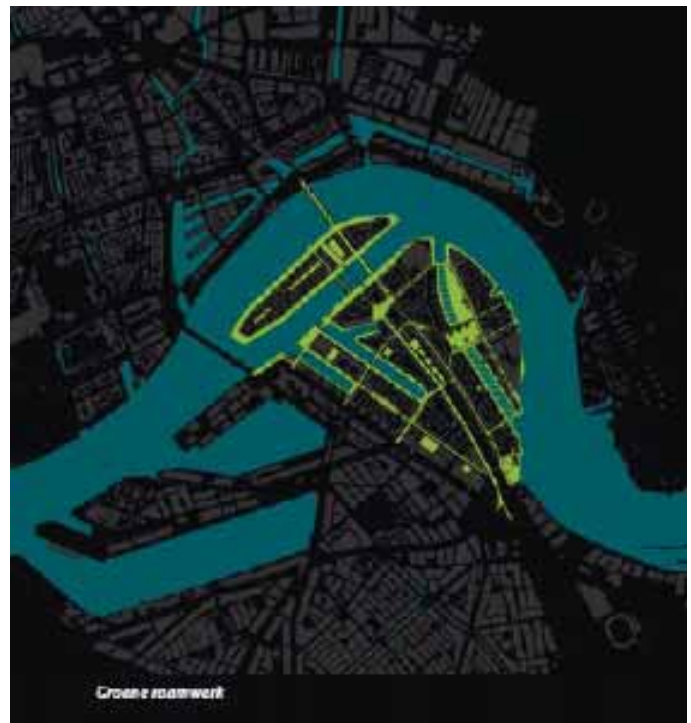
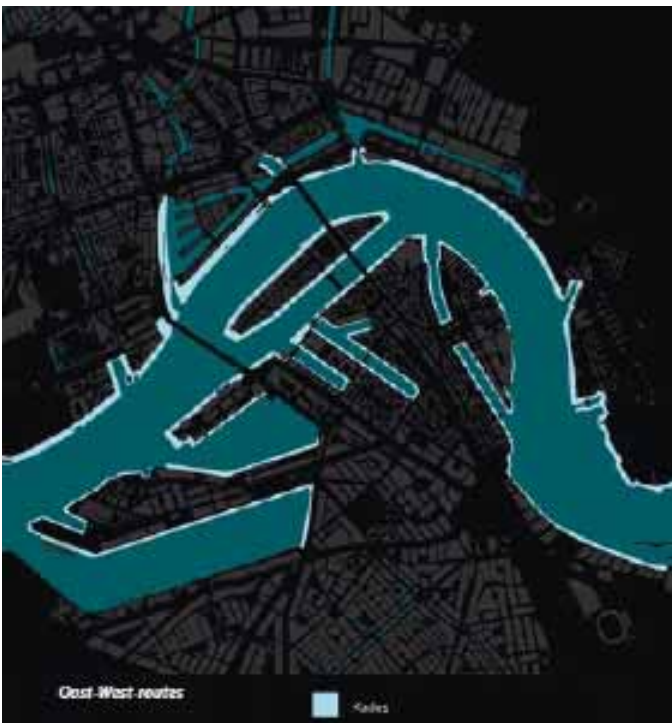
source: <http://www.top010.nl>

In addition to “Het pand van Waaning” however, the area also contains other characteristic elements of a more recent past.

Among these elements are the Wilhelmsbrug (top-left), Office building De Brug (top-right), The Erasmusbrug (lower-left) and the Wilhelminapier (lower-right).

According to Fortuin & Van der Graaf such elements have the tendency to become strong elements of the urban identity in that they develop an iconic-status through their architecture.

However, as Fortuin and Van der Graaf also state, one needs to carefully evaluate the socio-cultural value of such an iconic/monumental element. For, an icon might give one a sense of pride and connection to his/her city, however, it does not necessarily stimulate social cohesion. Thus, the value/characteristics of the elements found in this subquestion will also be evaluated at the end of this chapter.



source: visie Kop van Feijenoord

For now we move on to research the other elements that are stated as being characteristic. One other angle is that of the municipality, which includes larger water- and greenstructures.

This angle however still doesn't provide an adequate enough insight into Feijenoord's urban identity.

“Wijkcollege”:

A more direct angle towards acquiring indept information on the existing urban identity of Feijenoord was the “wijkcollege” (10-9-2010). An informal neighbourhood meeting in which various people involved with Feijenoord came to tell about there experiences in the neighbourhood.



Next to providing a momentary platform for a dialog, the wijkcollege also enabled one to gain some additonal insight in the various other activities and organisations in the neighbourhood. Thus a basis could also be laid for future contacts as visualised in the interview sheet on the right page.

The wijkcollege itself provided contact with:



John: An inhabitant of Feijenoord which has lived in the neighbourhood his whole life. John provided a good impression of the historic identity of Feijenoord and how it developed over the years from a more harbour oriented region to a more housing based neighbourhood. According to John Feijenoord is so problematic because all those that gained any wealth from the harbour activities moved away without ever significantly investing in the area. This also goes for companies currently active in the neighbourhood.



Zafia: An employee at the local Anadolu mosk. As Zafia states the mosk doesn't only serve religious purposes, but also provides recreational activities for its visitors. These activities range from pool/biljarts, to a playground for the young children. In addition to recreation, educational courses are also provided, such as linguistics or typing. Zafia states that the mosk has a hard time reaching the youngsters (15-20j.). The recreational activities do attract some, but usually they prefer to hangout on the streets with friends, where saidly some of them also get involved in mischiefs.



Ewout van 't Verlaat: Ewout is an employee at TOS (thuis op straat). TOS provides the younger children in the neighbourhood with various toys to play with in the public space. As such every child in the neighbourhood has the possibility to play and enjoy him/herself despite there domestic/financial situation.

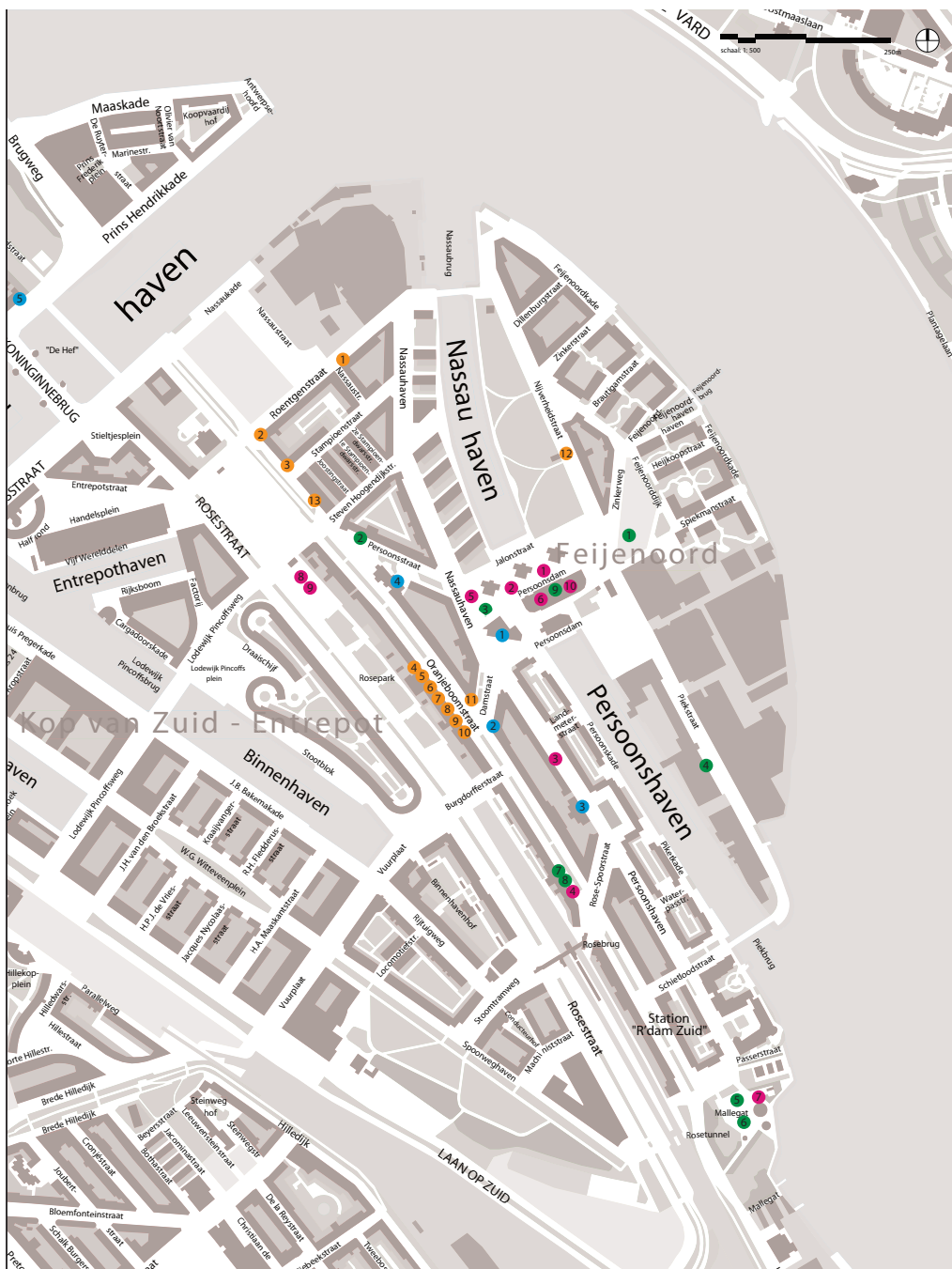
In addition to this TOS also provides social control on the various playgrounds, thereby ensuring a safe situation. TOS is active on school playgrounds, on the southern park of Feijenoord and in courtyards such as that of the Stampioenblok. There local HQ is situated in



Eefje Peddemors: Eefje works for Creatief Beheer. An organisation which is generally involved with the tranformation of often neglected areas of the public space. When doing so, the goal is to involve the local inhabitants an stimulate them to take the initiative. Following this method of work Eefje has also succesfully setup a temporay neighbourhood garden on an inactive buildingsite. With time Eefje believes the garden has increas-ingly come to attract some possitive attention of the inhabitants.



Dirk Veldhoen: Dirk is the locationmanager of sportshal “De Nieuwe Persoonshal”. As Dirk states the buildings doesn't only function as a mere sportshal. With time it has actually ‘grown’ to something closer to a community centre. This is a choice that was consciously made, seen as Dirk wanted to stimulate a sense of community. As such, Dirk also states that he doesn't see himself as owner of the building: “The people are the owners, all the people, all ages, all ethnicities”. As a result the building facilitates a wide range of activities: from theatrical plays, to elementary school gymless-sons; from soccertournaments to wijkcolleges. Dirk and his collegees however do cope with a few issue, in that the building has become outdated, overpressed an understaffed.



ECONOMIE, WERK & INKOMEN

1. Café / Bar Kale - 11/11/'10
2. Café Nieuw Feijenoord 11/11/'10
3. Sigarenboer - 11/11/'10
4. Beaty & Kapsalon - 11/11/'10
5. Supermarkt Sahan - 11/11/'10
6. Surinaams restaurant Mie Lobie - 11/11/'10
7. Sigarenboer KINO B.V. - 11/11/'10
8. Ali Baba Groente & fruit - 11/11/'10
9. Naamloze Broodjeszaak - 11/11/'10
10. Shoarma & pizza El Avivaa - 11/11/'10
11. Café de Ketel - 11/11/'10
12. Hans van der Born, Vincent Taapken, Paul van Wijk - 19/11/'10
13. Paul Zuidgeest - 25/11/'10

OVERIG

WTC | Marco van den Berg - 29/11/'10
EUR | Robbert de Vrieze - 17/10/'10

PARTICIPATIE & VRIJE TIJD

1. Ecokinderpark Creatief beheer | Eefje Peddemors - 11/11/'10
2. BOF | Marianne van Es en anderen - 15/11/'10
3. Speeltuin de Feijenoordse Middenstip | Ricardo Haakmat - 2/12/'10
4. Skateland | eigenaar
5. SWF Funzone De Koepels | Daniel Monteiro - 24/10/'10
6. De Tuigcommissie | Estatic - 24/10/'10
7. Anadolu Moskee | F. Karaaslan - 8/11/'10
8. Anadolu Moskee | S. Demir - 25/10/'10
9. SWF | José da Silva - 24/10/'10

OVERIG

Feijenoord Salon | Robbert de Vrieze - 17/11/'10
TOS | Christa Zwanenburg - 25/11/'10

ONDERWIJS

1. Agnesschool | Annet Dries
2. Bibliotheek Feijenoord | Ada de Groen
3. Heemskerk school PCBO | Tom Kros - 11/11/'10
4. basisschool de dukdalf | Charlot van Helden - 30/11/'10
5. ISOS | Gerdie Verheijden - 17/11/'10

OVERIG

Medewerker Zadkine - 5/11/'10
Stichting de Meeuw | Brecha Broeder - 6/10/'10
JOS | Sabien Kuiper - 2/12/'10

BEWONERS

1. Jongen (16) - 8/11/'10
2. Jongen (20) - 8/11/'10
3. Mohammed - 11/11/'10
4. jongen (21)
5. Speeltuinvereniging | Roeward
6. Ali (16) - 20/10/'10
7. Samira (21) - 24/10/'10
8. Walid (22) - 23/10/'10
9. 8 jongeren - 17/10/'10
10. 25 Marokkaanse jongeren - 24/11/'10

WONEN & WOONOMGEVING

OVERIG

Marco van Haandel & Jan Kooiman
Gemeentewerken - 12/11/'10
Barbara van Steen - 28/10/'10
Anja van der Sijde - 11/'10
stadstoezicht | Hasan Sagir - 15/11/'10
dS+V | Albert van Eer - 18/10/'10

GEZONDHEID & HULPVERLENING

OVERIG

SWF | Eus Hehanussa & Jolanda Moerkerke - 18/11/'10
SWF | Belinda van Mossel & Hans Paulides - 24/11/'10

*Other interviews conducted in the neighbourhood
(See 'De Nieuwe Belangstelling' (2011))*

The status and role of the public space:

The various interviews provided a good more indept insight into Feijenoord. However, the research is not limited to merely interviews. As part of a greater study on "littering in the public space" the research also goes on to evaluate the status of various locations in the public space. These locations largely follow from references made during the interviews (both positive and negative).

As such also the public space, the place that theoretically should provide a platform social cohesion, is evaluated on various aspects.

RECREATION; (SEMI-)PUBLIC COURTYARDS



1) Openbaar; Zuidereiland; :

- schoon:	ja	weinig zwerfvuil
- heel:	ja	begroeing oogt echter rommelig
- beheerd:	ja	gem. is verantwoordelijke
- gedefinieerd:	nee	weinig gedef. dmv. enkele speeltoest.
- aansluiting tuinen:	nee	rommelige, hoge erfafscheidingen
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



2) Openbaar; Persoonshaven; :

- schoon:	ja	geen zwerfvuil
- heel:	ja	geen gebreken
- beheerd:	ja	gem. is verantwoordelijke
- gedefinieerd:	nee	weinig gedefineerd t.o.v. formaat
- aansluiting tuinen:	nee	rommelige, hoge erfafscheidingen
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



3) Openbaar; Stampioenplein; :

- schoon:	?	
- heel:	?	
- beheerd:	ja	gem. is verantwoordelijke
- gedefinieerd:	ja	o.a. sportveld, speeltoestellen, etc.
- aansluiting tuinen:	?	
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



4) Semi-Openbaar; Steven Hoogendijkstraat-Nassauhaven-Persoonsstraat:

- schoon:	?	
- heel:		
- beheerd:	?	gem. is verantwoordelijke
- gedefinieerd:	ja	weinig gedef. dmv. enkele speeltoest.
- aansluiting tuinen:	nee	rommelige, hoge erfafscheidingen
- nadere uitleg:	nee	
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



5) Semi-Openbaar; Oranjeboomstraat-Rosepark:

- schoon:	ja	geen zwerfvuil
- heel:	ja	geen grote gebreken
- beheerd:	?	
- gedefinieerd:	ja	o.a. speeltoestellen, banken, etc.
- aansluiting tuinen:	nee	rommelige, hoge erfafscheidingen
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)

SPECIFICALLY INTENDED FOR RECREATION



1) Nassauhavenpark; Nijverheidstraat:

- schoon:	nee	vuil straatmeubilair
- heel:	ja	geen grote gebreken
- beheerd:	ja	gem. is verantwoordelijke
- afgebakend:	nee	geen sterke ruimtelijke grenzen
- gedefinieerd:	nee	weinig gedefinieerd t.o.v. formaat
- doelgroep:	geen specifieke	geen specifieke etniciteit, leeftijd, etc.
- populair:	ja	maar voornamelijk in de zomer
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)

2) Buurttuin, Creatief Beheer; Zinkerweg:

- schoon:	nee	klein zwerfvuil
- heel:	ja	oogt rommelig, maar geen grote gebr.
- beheerd:	ja	creatief beheer is verantwoordelijke
- afgebakend:	nee	geen sterke ruimtelijke grenzen
- gedefinieerd:	ja	o.a. speeltoestellen, picknicktafels, etc.
- doelgroep:	geen specifieke	geen specifieke etniciteit, leeftijd, etc.
- populair:	ja	voornamelijk bij 4-12 jarigen en ouders
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



3) Speeltuin BSW, De Feijenoordse Middenstip; Persoonsdam:

- schoon:	ja	schoon meubilair, geen zwerfvuil
- heel:	ja	geen gebreken
- beheerd:	ja	BSW is verantwoordelijke
- afgebakend:	ja	hekwerk bakent ruimte af
- gedefinieerd:	ja	o.a. speeltoestellen en materialisatie
- doelgroep:	4-12 jarigen	geen specifieke achtergrond
- populair:	ja	hele jaar door
- nadere uitleg:		
- cijfer:	4, goed	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



4) Speelplaats; Persoonsdam:

- schoon:	nee	klein zwerfvuil
- heel:	ja	geen gebreken
- beheerd:	ja	gem. is verantwoordelijke (+ TOS)
- afgebakend:	nee	speelplaats fungeert als doorloopplein
- gedefinieerd:	ja	dmv. sport, spel en "chill" activiteiten
- doelgroep:	4-12 jarigen	en leerlingen Agnesschool in pauze
- populair:	ja	voornamelijk in bijzijn van TOS
- nadere uitleg:		
- cijfer:	3, matig	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



5) Speelplaats; Mallegat:

- schoon:	ja	geen zwerfvuil
- heel:	ja	geen gebreken
- beheerd:	ja	gem. is verantwoordelijke
- afgebakend:	nee	geen sterke ruimtelijke grenzen
- gedefinieerd:	ja	o.a. speeltoestellen en materialisatie
- doelgroep:	4-12 jarigen	oudere kinderen op sportvelden
- populair:	ja	de sportvelden wel
- nadere uitleg:		
- cijfer:	4, goed	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



6) Speelplaats; Rosepark:

- schoon:	ja	geen zwerfvuil
- heel:	ja	geen gebreken
- beheerd:	ja	gem. is verantwoordelijke
- afgebakend:	nee	(ruimtelijk helder?)
- gedefinieerd:	nee	weinig gedefinieerd t.o.v. formaat
- doelgroep:	4-12 jarigen	oudere kinderen op sportvelden
- populair:	nee	de sportvelden echter wel
- nadere uitleg:		
- cijfer:	4, goed	(zeer slecht - 1,2,3,4,5 - bijzonder goed)



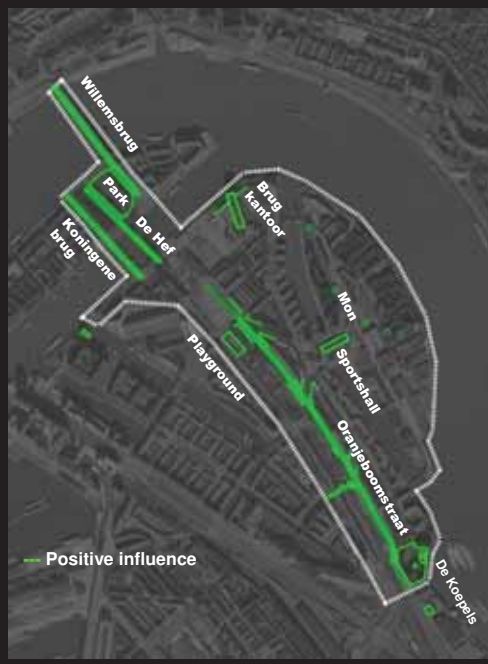
SWOT Analysis:

Combining the data acquired from organisations such as Rijksmonumenten with the input of the inhabitants and the more indept research of the public space one is now able to compose an overview of the numerous elements of Feijenoord and their relevance for the urban identity.

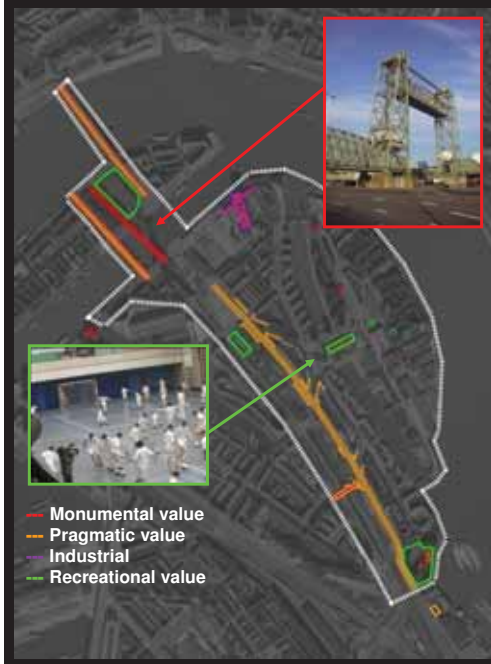
This overview thus contains the location, the effect and the characteristics of the elements.

Strengths

A) Relevance for Urban Identity



B) Characteristics of the elements



The strong elements are those that have a positive effect on the general urban identity of the neighbourhood. These are the elements to which either psoitive reference is often made in relation to the neighbourhood.

An example is the sportshal, to which people refer as a positive and pleasant place to meet their acquaintances for instance.

The SWOT however also contains monumetal elements as the Hef-bridge. As such, in reference to the subchapter 3.1, this SWOT not yet contains the usefulness of the elements.

Weaknesses

A) Relevance for Urban Identity



B) Characteristics of the elements



Elements documented under weakness are the elements that are either having a negative effect on the residential environment or elements that are inhibiting (re-creational) activities.

An example is the barrier that cuts the Rose-park of from the Oranjeboomstraat. As such two recreational activities that can strengthen eachother (rec. shopping and rec. greenery) are now cutoff from eachother.

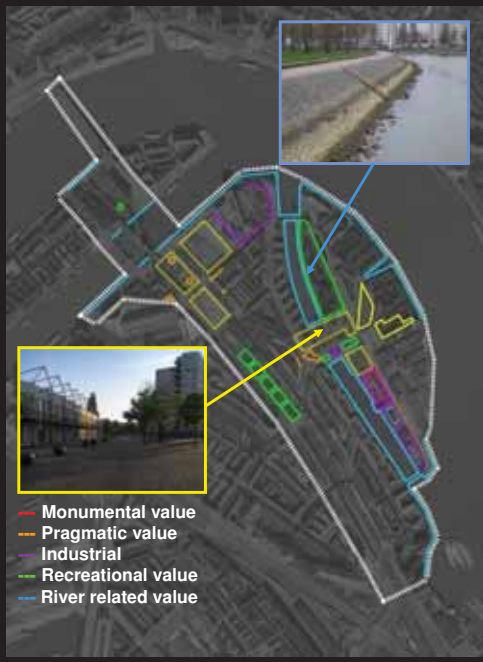
Another example are the industries that utilise heavy truck traffic, causing emissions and safety issues.

Opportunities

A) Relevance for Urban Identity



B) Characteristics of the elements

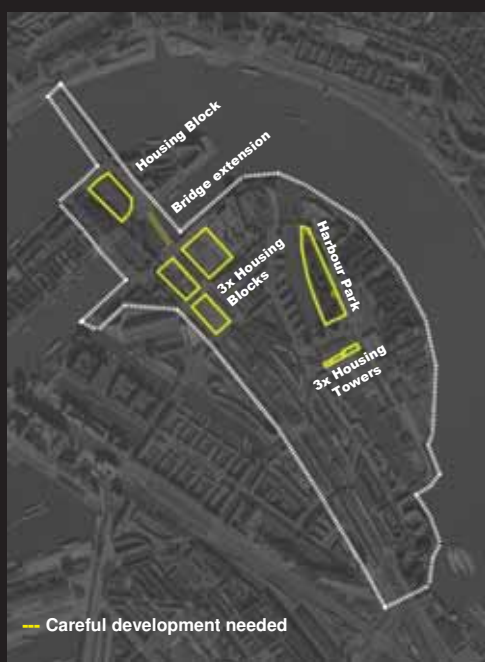


In reference to the weaknesses, as stated before, this SWOT is mainly an overview of the effect that an element has on the urban identity. Thus heavy industry might currently not positively influence the neighbourhood, but it doesn't exclude the possibility of utilising this industry to the advantage of the neighbourhood. Exploration of these possibilities is however better left for SQ4.

Other more apparent opportunities are the development of the wateredges and the development of the public space, especially those directly adjacent to popular, but overpressured facilities such as the sportshal.

Threats

A) Relevance for Urban Identity



B) Characteristics of the elements



Concerning the threats, the biggest threat the urban identity of Feijenoord is currently facing is that of the municipality's development-plans. Currently, a part of the community has already been displaced (negative gentrification); greenstructures planted by inhabitants are threatened to be built over; popular facilities are being relocated in order to facilitate housing for newcomers.

Distilling the actual identity:

Having made the an overview of the effect various element have on the urban identity of Feijenoord, one can now start to distill the the strongest and most useful elements. As one can understand the layers 'strengths' and 'opportunities' provide an initial collection of strong elements of the identity. Further distillation towards the elements with a socially active program/character leads us to the map as visualized on the right page.

In this "identity map" the elements of Participation&Recreation with a green sphere are the strongest elements of Feijenoords urban identity.

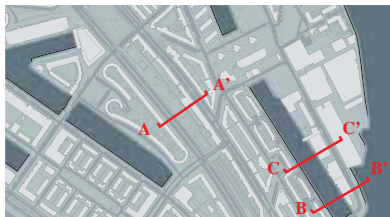


--- Strengths
--- Opportunities



--- Monumental
--- Pragmatic (econ.)
--- Industrial
--- Recreational
--- River related
--- Little/No significance

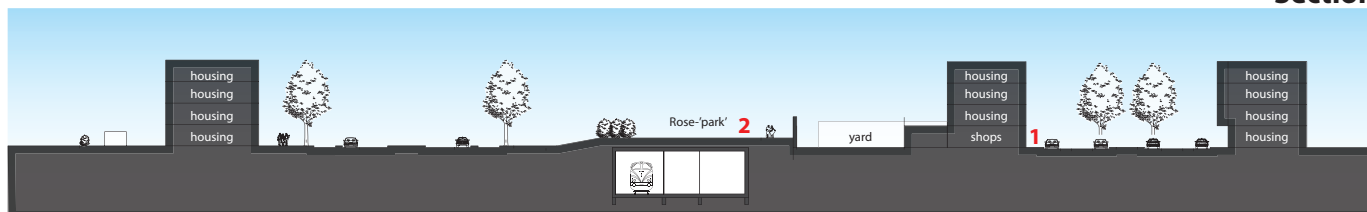




The process of deepening the research continues with the evaluation of spatial characteristics of these areas. To be more specific:

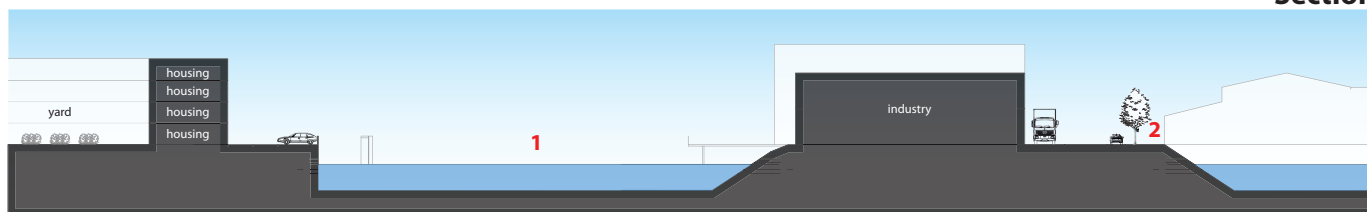
- sectional/proportional studies of these locations are made
- respective programs are mapped spatially
- 3D mapping is included site-specifically

Section



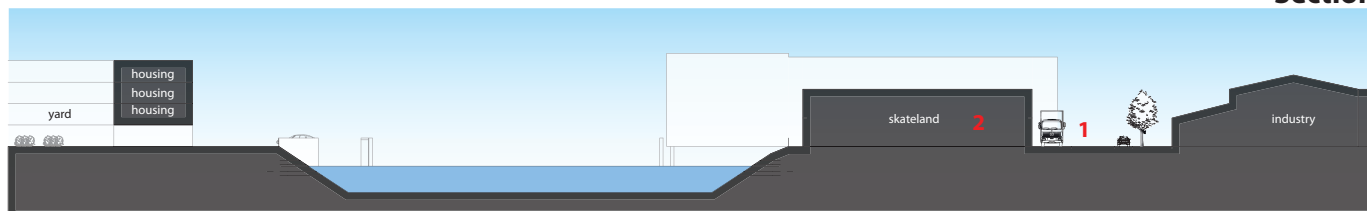
Next to the spatial composition of the Oranjeboomstraat shopping street, which is considered to be a string characteristic of Feijenoord, this section also shows how a wall-barrier separates this street from a nearby park. Redesigning of this barrier thus becomes an opportunity for future development.

Section

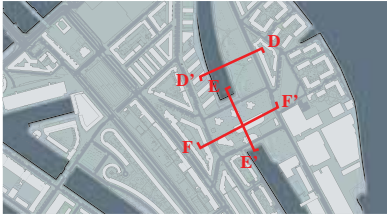


Section B deals with the the large bodies of water and the potential they have to become strengthening elements of the neighbourhood. A first step towards utilisation is the section-mapping as conducted here.

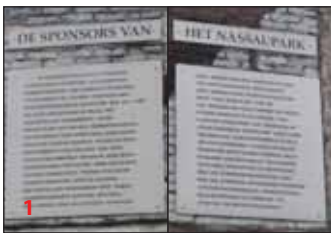
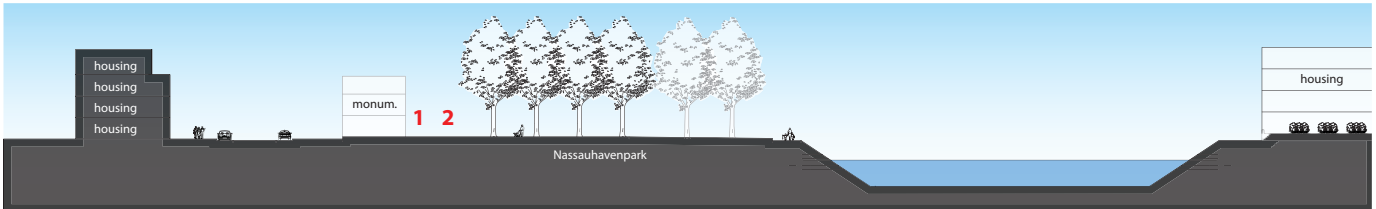
Section



Mapping of these bodies of water in various places also visualises the spatial relationship they have with various other element. Section C shows the current spatial relationship between water, housing/courtyard and skateland (an element with a potential to stimulate neighbourhood cohesion).

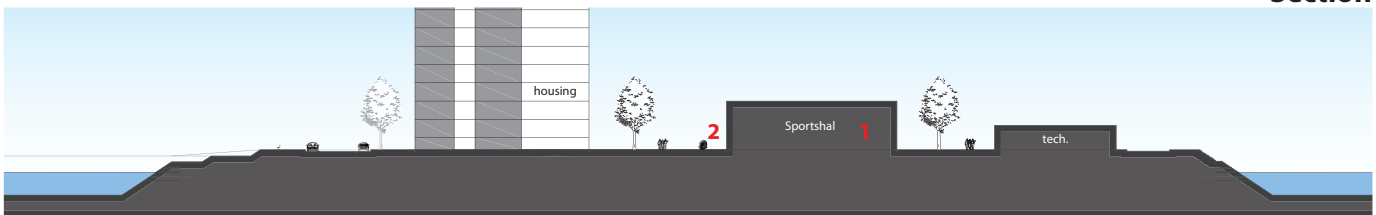


Section



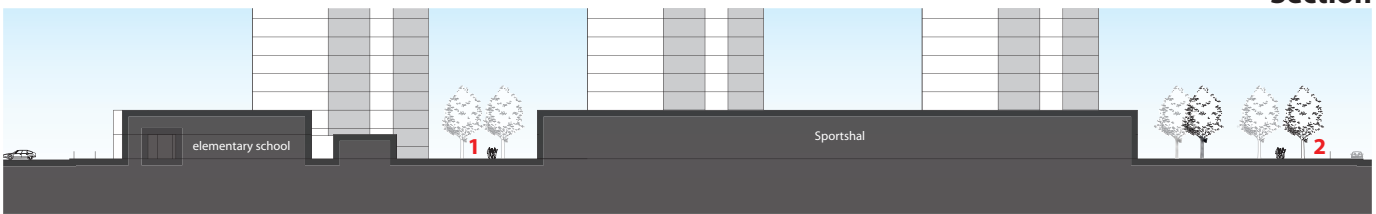
The Nassauhavenpark is also an element that positively stimulates neighbourhood cohesion. Moreover, the park was also developed as a joint effort of all who were involved with the neighbourhood at the time. With the passing of time however investing in the park has come to a crawl. Nonetheless the park is still an element of neighbourhood ID.

Section



Another very strong element of the neighbourhood ID is the sportshal “De Nieuwe Persoonshal”. As discussed in the interview-paragraph, this facility provides activities for a broad group of inhabitants and is open to anybody. The building itself however is a relative isolated whole, resulting also in an isolation from the surrounding space and bypassers.

Section



As with section E section F also deals with the spatial composition of edges. Here however the section focusses on the quality/lifeability of the open public space as an case onto itself. One finds that a good spatial definition helps to make a place more pleasant and clear, thus making it also more susceptible to programming and use (1). This however isn't the case for al the public spaces/squares in Feijenoord (2).

Design:
Utilizing Inherent Urban Identity

Recapitulation:

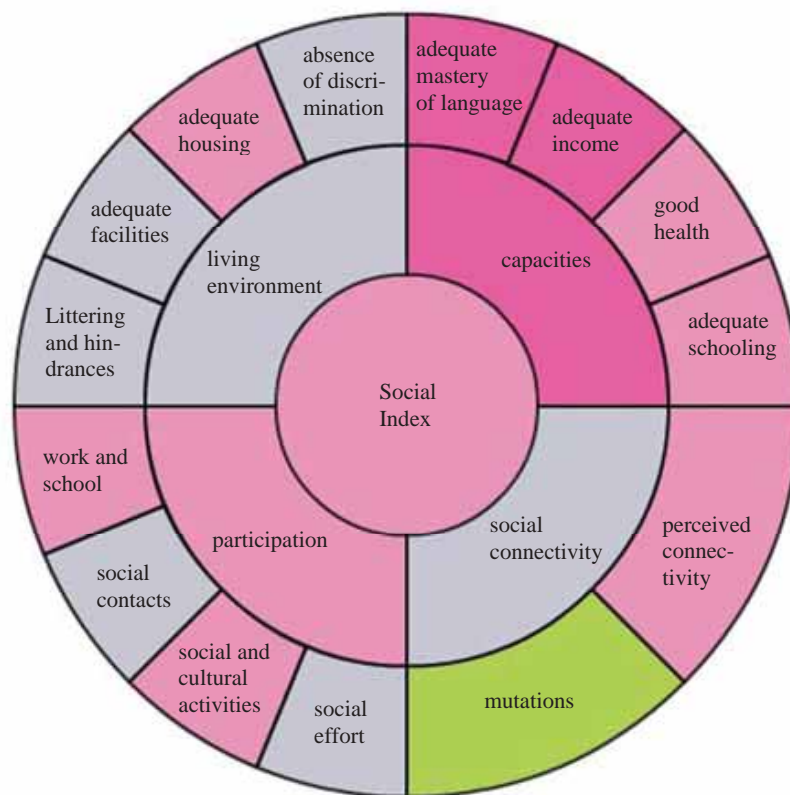
As we have learned through the research conducted in chapter 4 / subquestion 2, Feijenoord is a neighbourhood that deals with a lot of issues. These issues range from littering and other hindrances in the public space, to tensions between various ethnicities and age groups; from social isolation and depression, to physical health issues; from teenage mothers and unemployed adolescents without a start qualification/diploma, to illiterate (allochtonous) adults that all find themselves restrained from pursuing their interest (see image below).

Thus, as the status of a neighbourhood is measured by the wellbeing of its inhabitants, Feijenoord carries the label of a problematic neighbourhood.

In addition to the amount of issues, a large number of these issues also prove to be intertwined and relatively intangible in their nature. As a result, the complexity of the assignment steadily increases. For how does one address such complex, seemingly intangible socio-cultural issues within the spatially oriented disciplines of architecture and urbanism?

More specifically:

How can the inherent valuable aspects of the neighbourhood be developed along with the new requirements in a harmonious/liveable way, which benefits both what is there (the inherent socio-cultural aspects of Feijenoord (sub-q. 2&3)) and that which is to come (the natural occurring changes in socio-cultural aspects, and the desired developments as described in the Rotterdam city-vision (sub-q. 1&3))?



*Fig. : The problem; a complex interlinked network of problems, often of an intangible nature.
Legend: from Violet, to Pink, Grey, Light Green and Dark Green; Violet being the most problematic
source: COS, buurtanalyse Feijenoord, may 2009*

Angle of approach:

Essentially this final thesis question forms the step towards an actual design.

Inherent to the nature of this thesis, such a design will have to focusses on the complex relationship between space, individual and wellbeing.

This relationship has also been researched within *Veldacademie*, the knowledge center for neighbourhood transformation. In collaboration with practical philosopher Henk Oosterling an approach was also formulated that not only translates the illusive term 'identity' to more practical terms, but also ties individual wellbeing to actual space or environment (see image below). Furthermore, by adresssing the various interests of the inhabitants and linking these interests the potential arises to create an integral social network that stimulates the emergence and consolidation of the inhabitants' inherent potential, thereby regenerating the neighbourhood in a sustainable way.

As such, not only the link with architecture and urbanism becomes apparent, but also their far reaching relevance when it come to the wellbeing of the individual. For, architecture and urbanism provide the actual programmatic and physical environment for the development of the individual. More specifically, it is the capacity and appropriateness of this physical and programmactic environment to facilitate the inhabitants' sence of purpose, recreation, work, material security, etc. that determine wether its composton in an adequate one.

Based on Alexander (1972) and Lynch (1960) we have already determined that this role of the programmatic and physical environment is most relevant at the scale of the neighbourhood.

Thus we can conclude that Feijenoords spatial and programmatic setup is still lacking the appropriate composition to support a number of its inhabitants.

This is in part due to the method by which the municipality governs its neighbourhoods at determines their spatial and programmatic setup (see subquestion 1/ chapter 3). As such, in the broader sense, a series of interventions should also take place within the governance of the municipality and their undelying politics. This part of the matter is however better suited for a different type of thesis and studio.

The focus of this thesis will remain that of the programmatic and spatial composition of the environment as a basic ingredient for the inhabitants wellbeing.

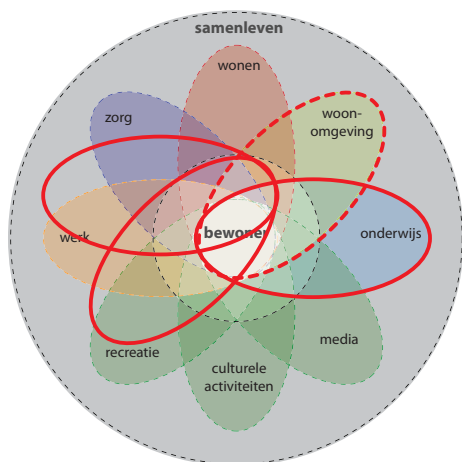


Fig. : The angle of approach: From Maslow's approach of the individual to the Livingspheres approach;
source: report "De Nieuwe Belanstelling", march 2011

Representative examples

Every individual is unique, as such the specific problems, desires and interests can also differ per individual. This poses an issue, seen as one can not address every individual's specific problems in detail. Thus, the strategy is to find the commonality between these individual problems and address them from there on out.

This yields a series of representative groups in the neighbourhood of Feijenoord, which we will discuss here. For a more extensive overview reference is made to the report "De Nieuwe Belangstelling" (2011) developed within Veldacademie Rotterdam.



	aantal wijk	% wijk	% digm.	% Rotterdam
jongeren met startkwalificatie	187	28%	32%	43%
jongeren zonder startkwalificatie	337	51%	48%	40%
vsv-ers	133	20%	20%	17%
niet werkend werkzoekend		18%	15%	9%
overlast van groepen jongeren		31%		20%

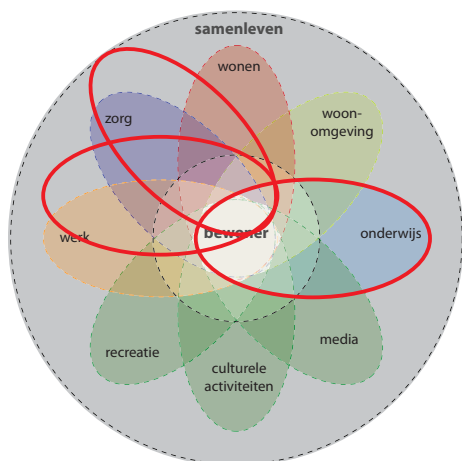
bron: Buurmonitor 2009, vsv monitor 2009, Veldacademie, JOS 2009, Sociale Index 2010; Feitenkaart Inkomen 2007; Veiligheidsindex 2010, Jeugdveiligheidsindex 2010.

Youngsters

The youngsters of Feijenoord (age 14-22) form one of the most characteristic groups in that they are large in number, but also deal with a variety of interlinked issues. Often the education level is found to be quite low. This can have a broad range of reasons that are not always easily tracked down. These range from a troubled domestic situation, to drug use, etc.

This often also results in a number of school drop-outs or vsv-ers (see table).

The problems however don't stop there. In general what one learns; from both data-research and interviews; is that the low level of education forms a limit in terms of jobopportunities. With no job, no easily accesible forms of recreation and an unpleasant domestic situation these youngsters often decide to spend their time outside, in the living-environment. Here they are quickly seen as a nuisance and are labeled "the loitering youth".



	aantal wijk	% wijk	% digm.	% Rotterdam
moete met Nederlands		33%	24%	14%
goede taalbeheersing		3,1	3,7	5
huishoudens die moeilijk rondkomen		36%	26%	17%
eenoudergezinnen	200			
paar met kinderen	90			
kinderen in gezin met 105% sociaal minimum			19%	17%
% matig eenzaam DGRdam		42%	51%	42%
% hoge score emotioneel en soc. eenzaam DGRdam			20%	16%

bron: Buurmonitor 2009, vsv monitor 2009, Veldacademie, JOS 2009, Sociale Index 2010; Feitenkaart Inkomen 2007; Veiligheidsindex 2010, Jeugdveiligheidsindex 2010.

Allochthonous adults/parents

Another characteristic group is that of the allochthonous adults and parents. An initial problem here is also that of low education. This is often due to a tough transition from a foreign country. This group however is often more motivated to find a source of income, in that they often have to provide for their family. Education keeps playing a vital role to reach this. Ironically in some cases it is the strong social connectivity within the group that maintains the problems. Due to a 'culture of shame' many individuals remain hesitant to enroll in an educational program.

Thus a change in mentality is necessary from the side of the individual. Low threshold opportunities however also play a part. This is also the case for young parents (often mothers) that find themselves stuck in their role. Frustration within the household and depression often also set in. In this case it is not directly education that is a focal point, but sooner support in the domestic situation and the upbringing of the child. This is also the case for the adult allochthonous mothers. These parents often find themselves in an even tougher situation resulting in isolation, depression and even physical ailments.

Initial program, summarized

As stated before, the composition of the environment plays an important role in the wellbeing of the individual. Providing the opportunity for an individual to pursue his or her interests can be stated as one of the most important roles of this environment. Thus, interventions must augment the existing environment in such a way that it is better equipped to facilitate its users.



One field in which the existing environment is currently lacking is that of education. This is often education in terms of language courses, the training of job application skills and the like. Augmenting the current environment so it can provide such spaces thus becomes one of the points on the designlist.



Additional programs that raise interest are sports and fitness spaces to exercise personal physical health, programs such as daycare centers that enable parents to leave their child in trusted hands whilst working on their own personal development; large spaces that can host school plays and gymclasses; spaces that can host various cultural activities; etc.

As stated in the paragraph “Envisioned end Product” Chapter 1. Such interventions must also maintain a certain flexibility, in order to adapt to the changing needs and interests of the users, thus increasing their efficiency as a strategic intervention.

We will discuss this flexibility in later paragraphh.



In terms of the earlier discussed social contacts, the environment must also be developed in such a way that these can be facilitated. Not only in terms of the chance encounters, but also in the form of spaces that are specifically developed for gathering and meeting.

This not only provides an outcome for the earlier discussed groups, but it can also play an important role when it comes to the larger planned neighbourhood gatherings (to be discussed later). Such a space can become the livingroom for the community.

A physical place for the intangible social network being created, reflecting its versatility, transparency and accessibility to all.

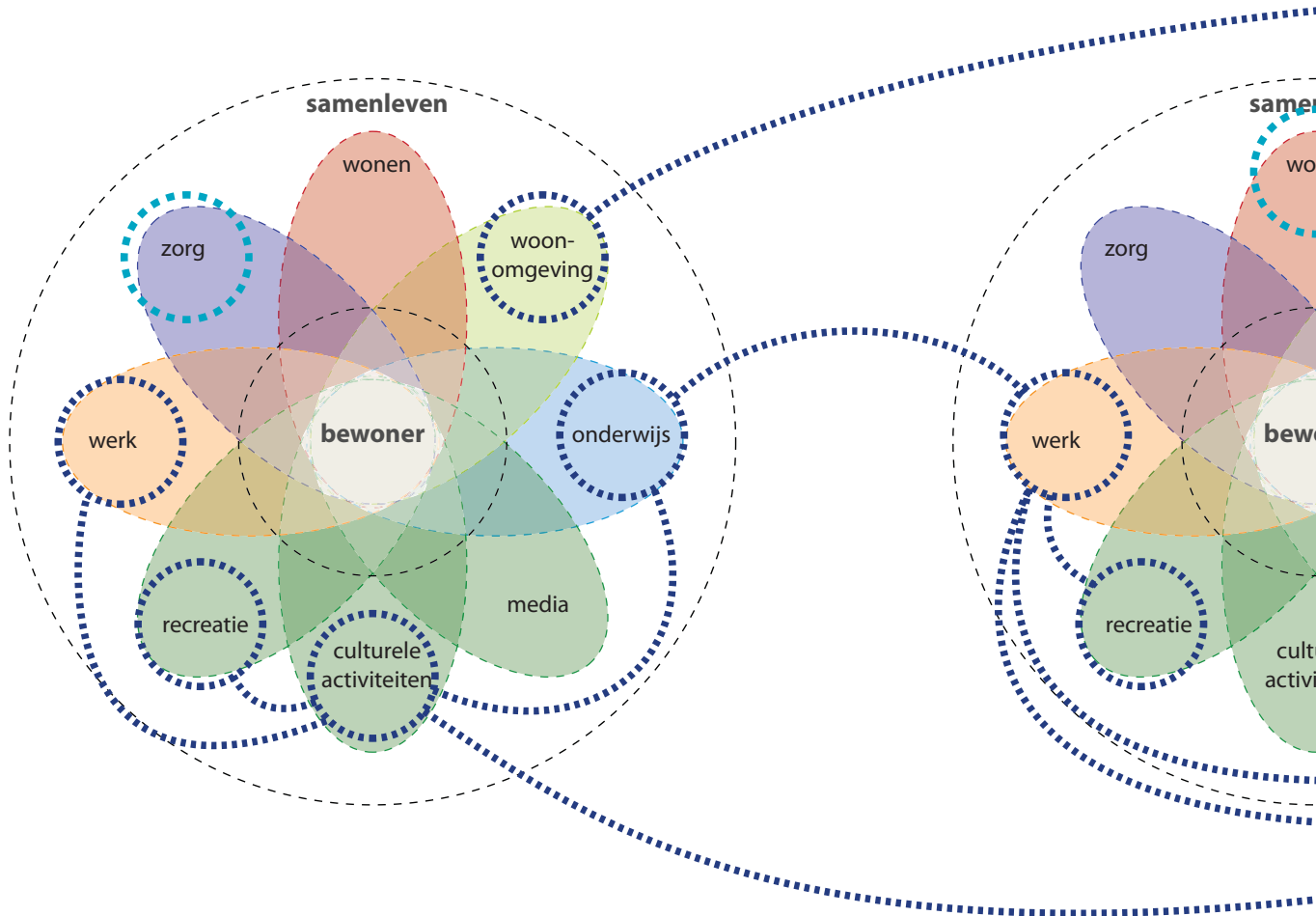




Adults / Parents



Youngsters



The active social network

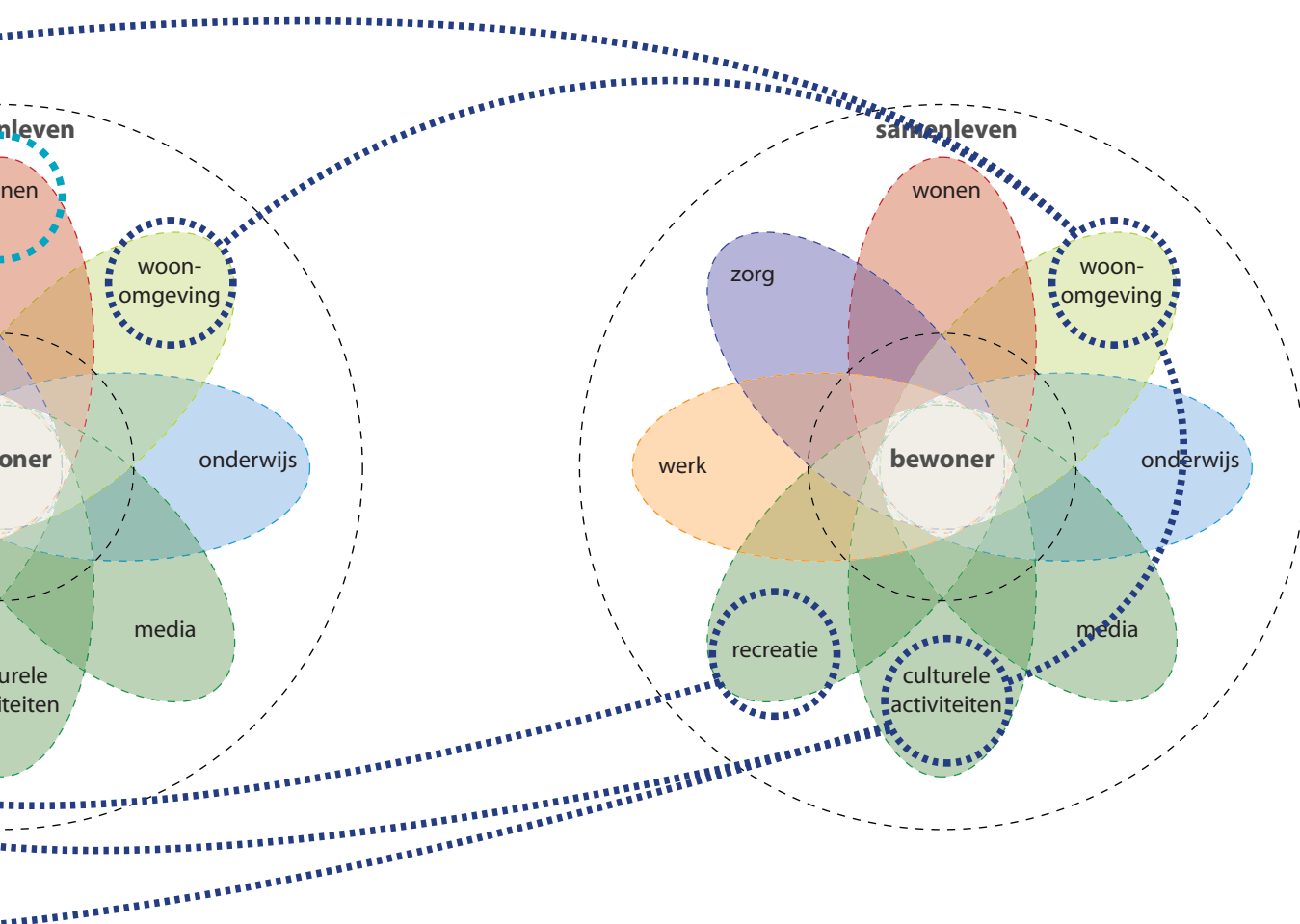
As stated in the paragraph “angle of approach” the m.o. is not only to facilitate all the inhabitants individually or per group, but also to link these groups. Doing so we not only maintain the thin social structures of status quo, but we solidify them and in addition stimulate the creation of even more active social crosslinks.

Active in the sense that the linking of people enables them to share and utilise one another’s talents and interest, thereby not solely benefitting the individual or the groups, but also the entire neighbourhoods network in a socially sustainable way.

Such links or collaborations can take place as visualised with the examples in the scheme above. An example is to provide youngsters with the possibility to exercise the abilities they already possess. For instance, these youngsters often speak 1 foreign language or even more, plus they can navigate their way in the dutch language. Thus the possibility arises to link a group of youngsters to a group of adults for language classes or computer courses. Under guidance of a social worker one could then organise courses in the newly adapted spatial and programmatic environment.



Young Children



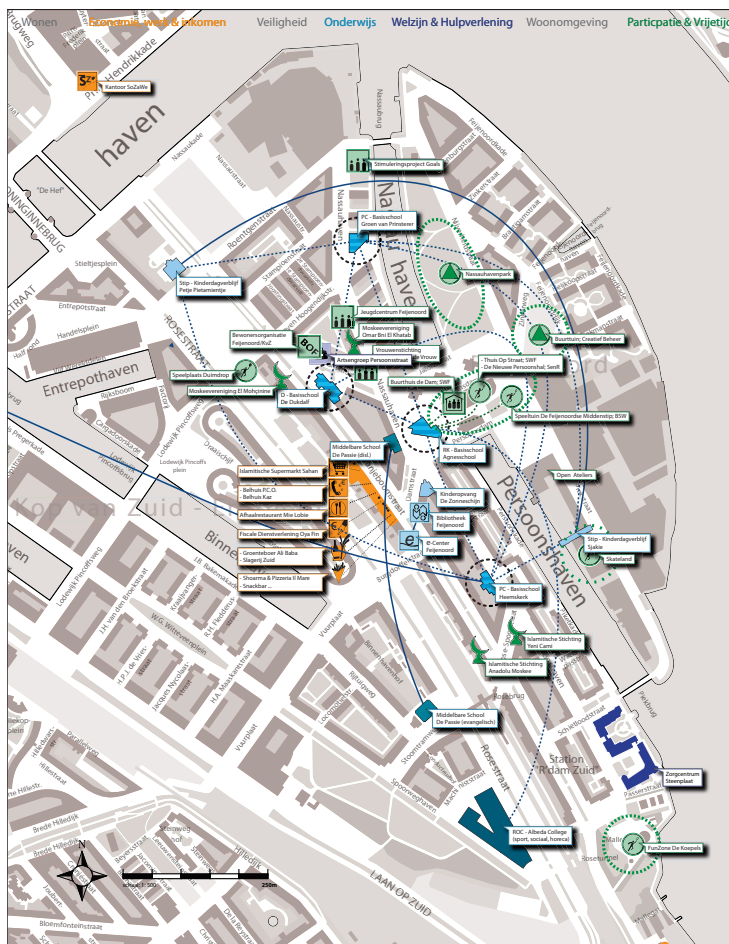
In terms of linked interests the setup is clear: interested adults are provided not only a space for study and a professional guide (social worker/teacher), but also a personal guide (youngster). For the participating youngster payment can also be included as an extra incentive.

As such, the youngster are provided with work and a growing resume. For the adults the possibility to exercise their new skills can take shape in the form of cultural activities. These could be cultural activities that play into the adults expertise in terms of ethnicity and religion based culture, thus increasing the attractiveness for participation and linking. Such activities could even be linked to schoolprograms and further linking the initiatives to Creatief Beheer* creates a platform for actual direct transformation/augmentation of the physical environment.

Youngsters can also link to this via application to TOS Thuis Op Straat, and organisation that often focusses on providing young children with a pleasant and save playing environment.

Thus, putting in an effort not only yields direct and indirect benefit for only that individual, but as stated before, it adds to the welfare of the entire network.

* Creatief Beheer is an organisation active in Rotterdam (and Feijenoord), that stimulates an coordinates the participation of inhabitants in the transformation of their environment.



source: report "De Nieuwe Belanstelling", march 2011

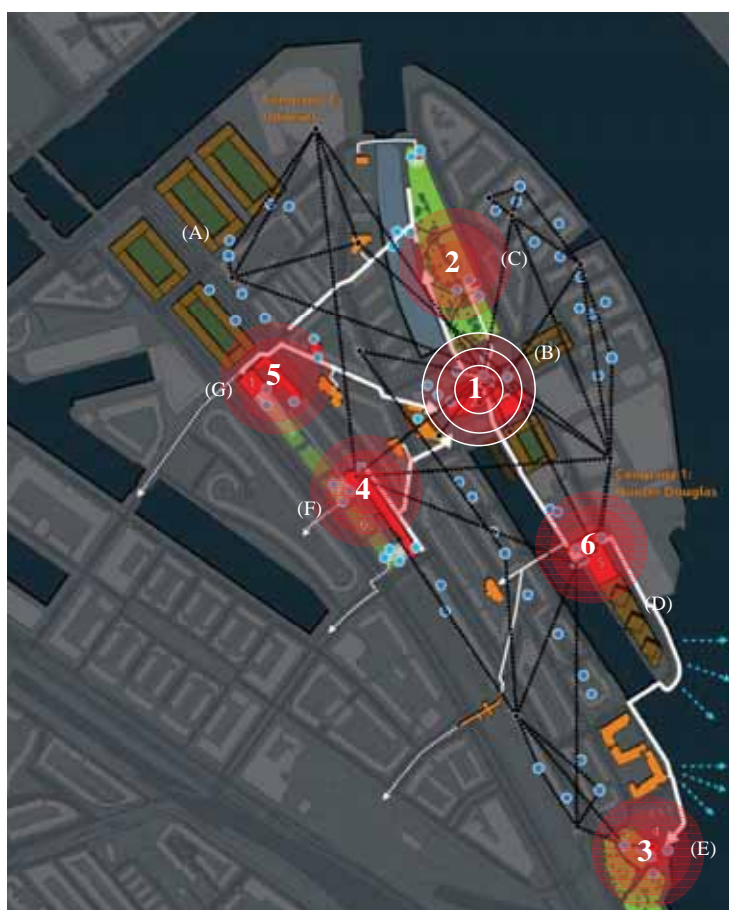


Spatial locations/nodes

In the previous part we have discussed how we can address the inherent qualities of the inhabitants and link these in an active socio-cultural network. We have also stressed the significant role that the actual spatial environment plays in this.

Thus before we start intervening in the environment it is necessary to have an understanding of how it currently functions. Such a research was conducted during subquestion 3, chapter 5.

This research yielded 6 points within the current setup of the neighbourhoods' environment that possess an inherent potency or quality to spark the interest of many inhabitants.



Thus, in order to maximize the effectiveness, these 6 points become significant spatial nodes or crystallisation point for the network. These 6 nodes are currently known as:

1) Shoppingzone Oranjeboomstraat, 2) Sportshall Persoonshal, 3) Skateland, 4) Funzone De Koepels, 5) Nassauhavenpark, 6) Duimdrop playingfields.



source: <http://buurtlink.nl>



The letters show the phasing of the interventions in consideration to the larger housing oriented plans of the municipality (see also subquestion 1). The phasing starts with the housingprojects of A, which yield the initial financing for the following projects. These following projects include B: the simultaneous realisation of additional housing (financing) and augmentation of nodes 1 and 2, the Persoonshal and Nassauhavenpark (C). This is followed by phase D and E; a slight augmentation (accessibility) of nodes 6 and 3, skateland and de Koepels. Phase F and G then include the Oranjeboomstraat and the Playingfields which are developen in unicen with the adjacent housingprojects.

For the actual design assignment the choice was made to augment node nr 2. the sportshall De Nieuwe Persoonshal into a Multifunctional Community Livingroom.

The Persoonshal

The persoonshal is essentially a large sports oriented building built in 1986. However, the user flexibility that it provides with its halls has made it much more then just a sportsbuilding. In time it has grown to become a much used facility in the neighbourhood and thé place for various cultural activities and special events. As such, when looking for places with an inherent tendency to unite people, the Persoonshal ranks number 1 in Feijenoord.



Breakdance masterclass
source: <http://www.roffa5314.nl>



Sportsday for the neighbourhoods four elementary schools
source: <http://www.agnesschool-rotterdam.nl>

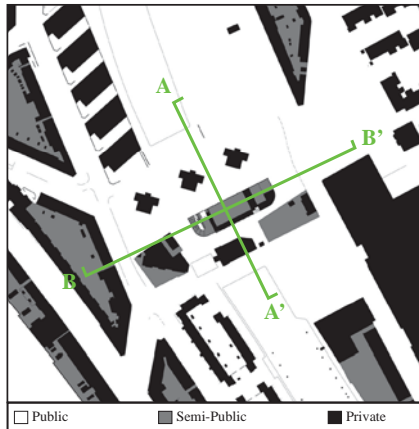


Wijkcollege organised by Veldacademie/author



Sportsevent Soccer AKKAdemie
source: <http://www.deweekkrant.nl>

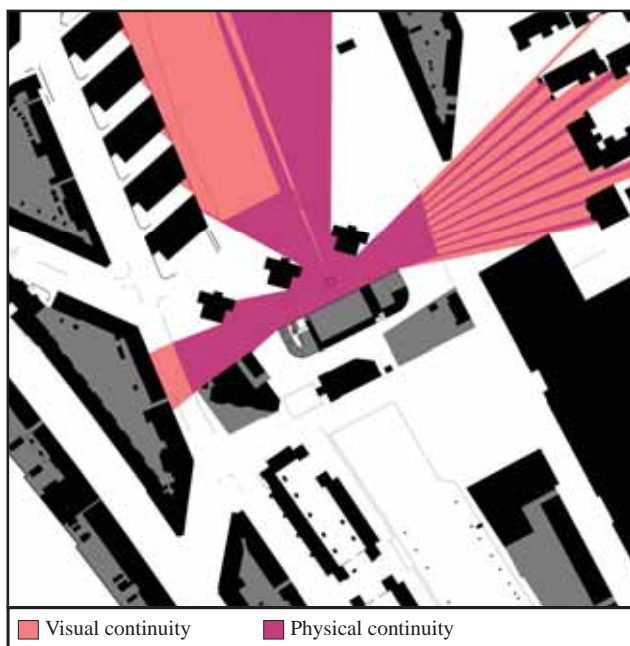
Public, Semi-Public, Private



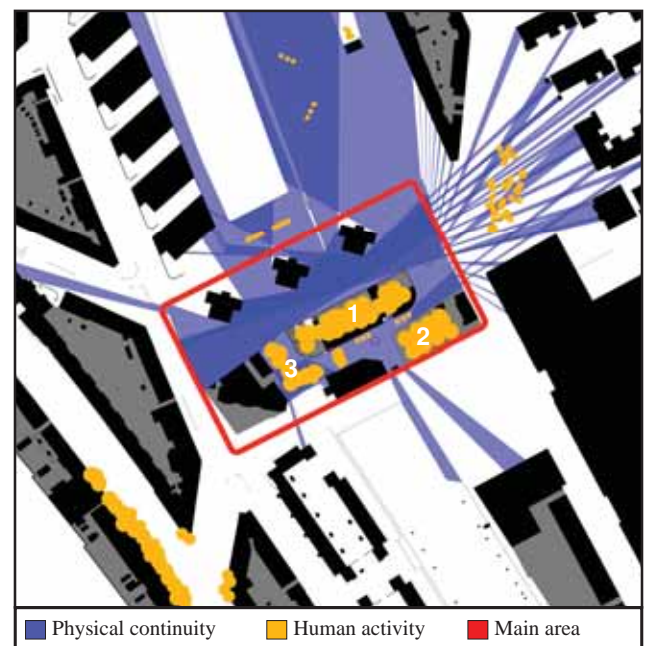
Additional Analysis for the architectural assignment

Viewing the schematic SWOT-map of the urban scale (Subquestion3), one can already distill some suggestions for the sportshal location. Other strong indications and hypotheses for possible developments of the location were also found, but additional data was needed in order to address this specific site. Naturally, a first step in this was the further specification of the data collected, such as the previously discussed sections (see right page). New types of data were however also collected, such as the amount of public, semi-public and private space surrounding the sportshal. This second step immediately brings into perspective the amount of public space one has available for enhancement of the sportshal as a key environmental element of the neighbourhoods' urban identity.

Visual and Physical continuity



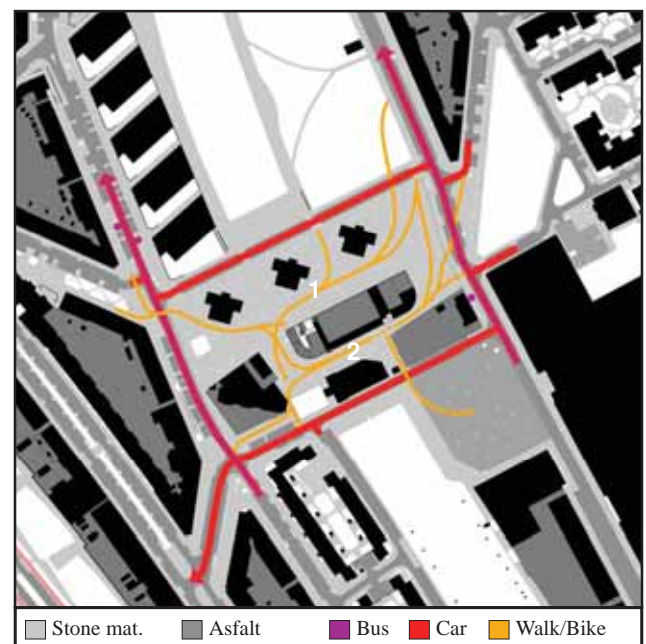
Placeness/Human activity



Greenery/Vegetation

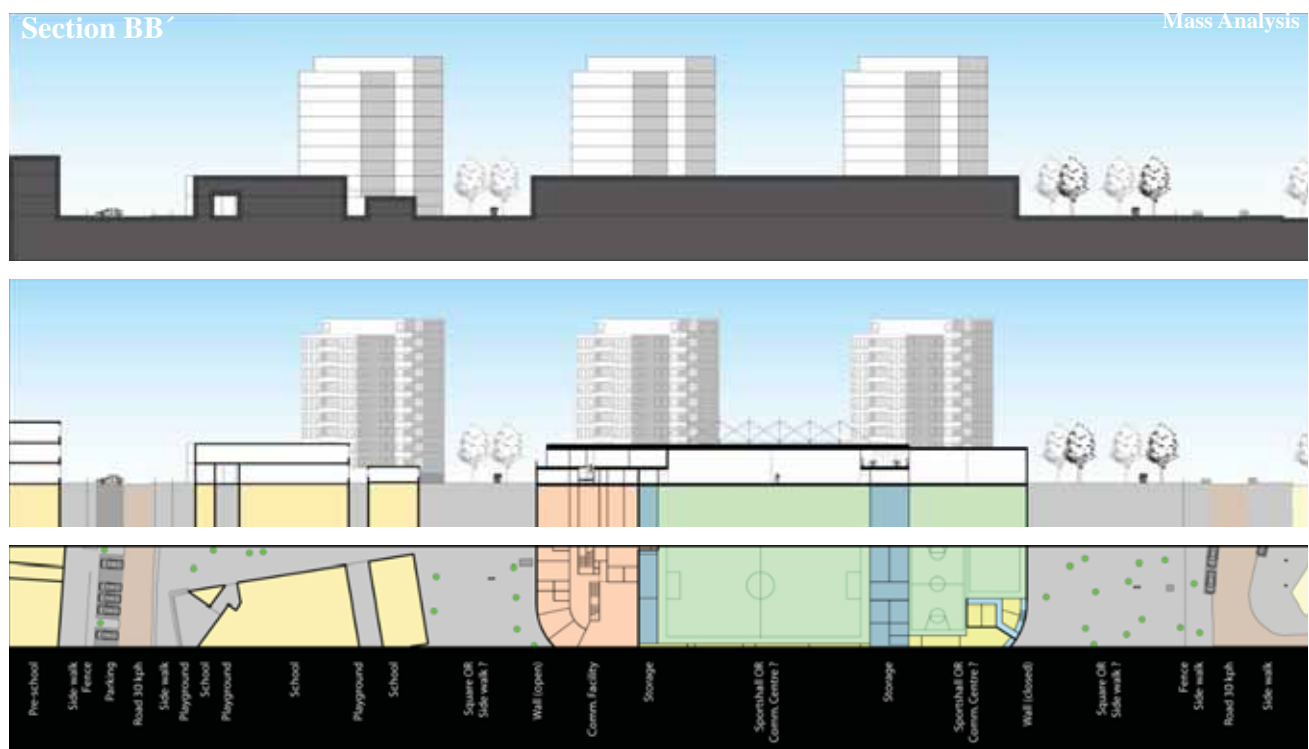
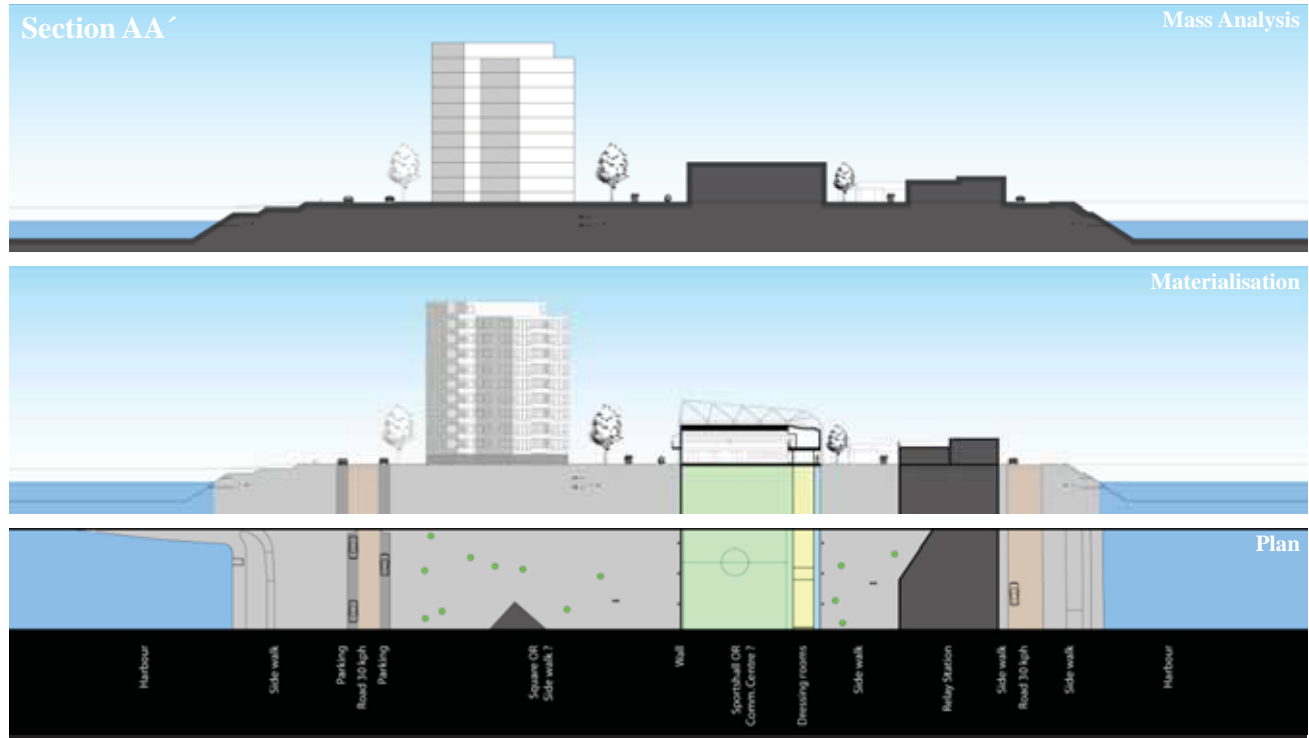


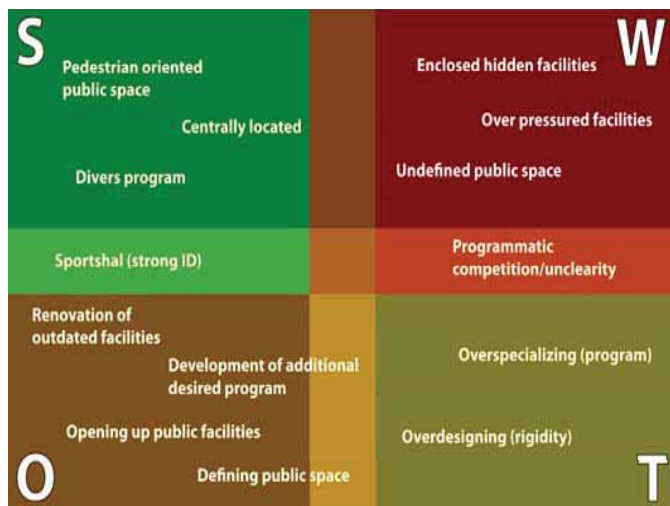
Materialisation



Step three in deeping the insight into the location was to research the extent to which this immediate public space has a sense of placeness (Relph 1976).

Here one finds that the square on which the sportshall is located, generally functions more like a large sidewalk. This is especially the case for the northern side of the sportshal, where virtually no activity takes palce. Consequently this area does present an opportunity for development/extension of the sportshal activities and the strengthening of a place for the community. Including the greenery in such an approach, along with a redefinition through materialisation can strengthen such a development.



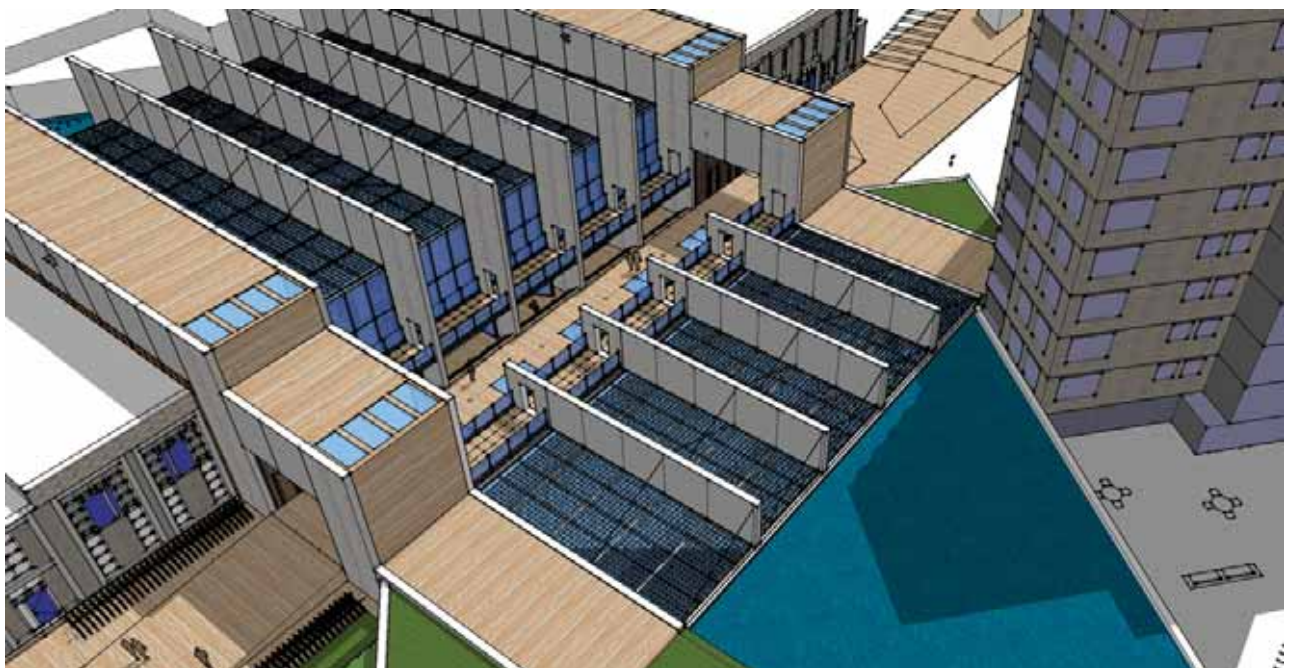


Summurized SWOT

Based on the previous data we are now able to summarize the research on the persoonshal into the SWOT overview as depicted here to the right. In a nutshell this yields the following design question as the focus for the intervention:

How to combine the building that has reached its maximum capacity and flexibility, with the surrounding barren and unstructured environment of the 'square'?

And how to do so in such a way that the environment obtains a clear structure, yet still has the flexibility to facilitate the interests of many inhabitants and in addition also stimulates their active interaction?

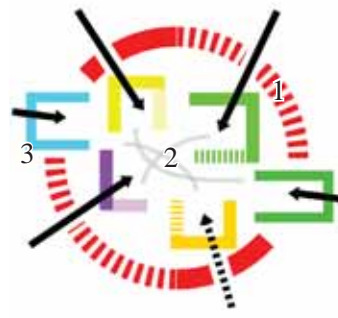


CONCEPTS

SOCIAL CONCEPT:



**Old Situation:
Isolation**



**New Situation:
Interaction**

The change in the hall's character can also be visualised as depicted to the left. Here one can identify three fundamental changes to the original hall:

- 1) Interaction between outside and inside, making the building more inviting and utilizing the otherwise deserted square.
- 2) An interaction of the programmatic elements, also stimulating the various visitors to interact. (See paragraph "The Active Social Network.")
- 3) The addition of new program, making the hall an interesting place for a wider audience.

BUILDING CONCEPT:



Old: Building is a box



**New: Building outside
the box**

In line with point nr. 1 the building concept as a mass will also change. Here the mass will be reshaped into a more open composition: The "building outside the box" or even more specific, "the building as an transparent accessible box" if you will.

MATERIAL CONCEPT:

Continuity through Contrast



Jobsveem housing block, Rotterdam
source: <http://www.nationalerenovatieprijs.nl>



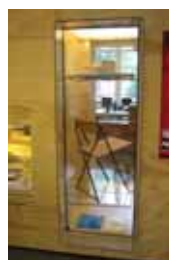
DOK library, Delft
source: <http://www.omroepwest.nl>



Bouwkunde, Delft



BK, Details

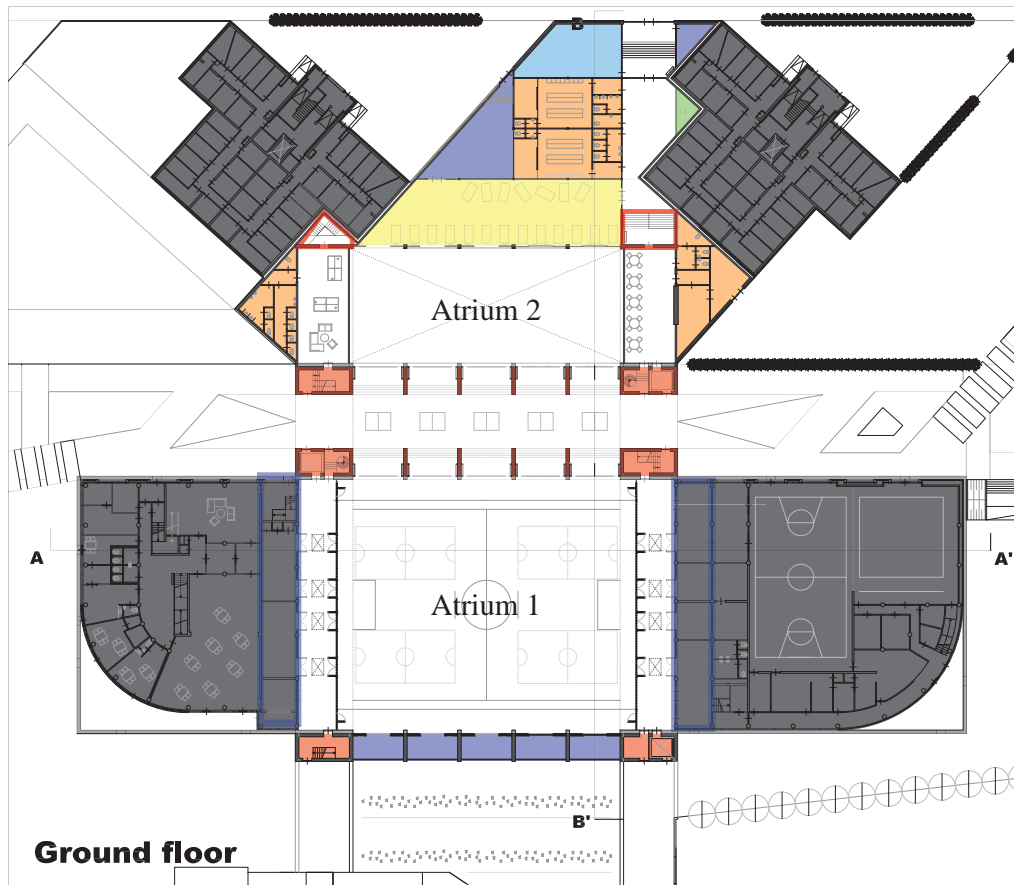


In terms of materials the concept can be described as "continuity through contrast".

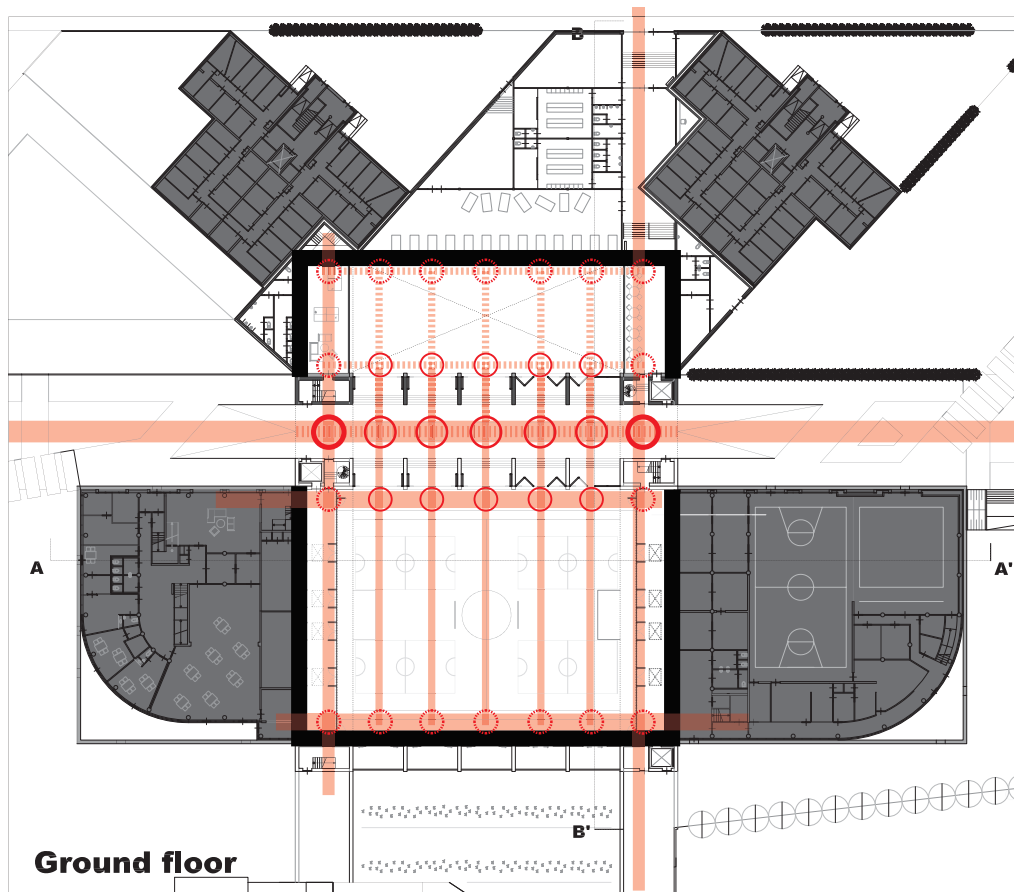
In this concept "continuity" stands for a preservation of the inherent urban identity of the neighbourhood (here: it's shared characterising denominators). However the aim is also to bring about a great change in the social status of the neighbourhood. Thus these changes should be clearly visible in the interventions, while maintaining the old image as a basis for recognition. That is where "contrast" comes into play.

Seen as the most common material of the current building is brick, the new materials are to be: wood, glass and steel. This also has its additional values. Wood for instance refers to the strong harbour character of the neighbourhood. Whereas glass has a more direct social oriented intent, namely the breaking down of the hard barriers as described in the social concept. Steel has a more basic use as structural support for the glass.

Concrete is also used (as a secondary material), thus also creating contrast, while at the same time forming a bridge to the brick, with its stone-like essence.



Ground floor: Programmatic setup; yellow=fitness, orange=sanitary functions, purple=storage, blue=installations



Ground floor: The intersecting routes stimulate interaction through interference

Focus

As stated before the great strength of the Persoonshal is the flexibility it provides with its large halls. This characteristic is focussed largely in the central hall, thus the design augmentation also focusses on this part of the building. Leaving the rest of the Persoonshal unrevised enables one to establish the earlier discussed contrast between old and new.

Intervention and Program

Thus in order to provide the inhabitants with a better suited environment, the old central part of the building is torn down. This is then replaced by larger central atrium (Atrium 1). In doing so, one is not only able to create a larger space in terms of surface and volume, but the building's skin can also be developed in a more transparent, accessible and inviting way. In addition this new skin can also house features that boost the buildings flexibility and energyconsumption (see following paragraphs).

In terms of capacity, a large expansion in the form of a second atrium (Atrium 2) and its accompanying program.

Among these program components is also a fitness area, for which interest was expressed in the neighbourhood.

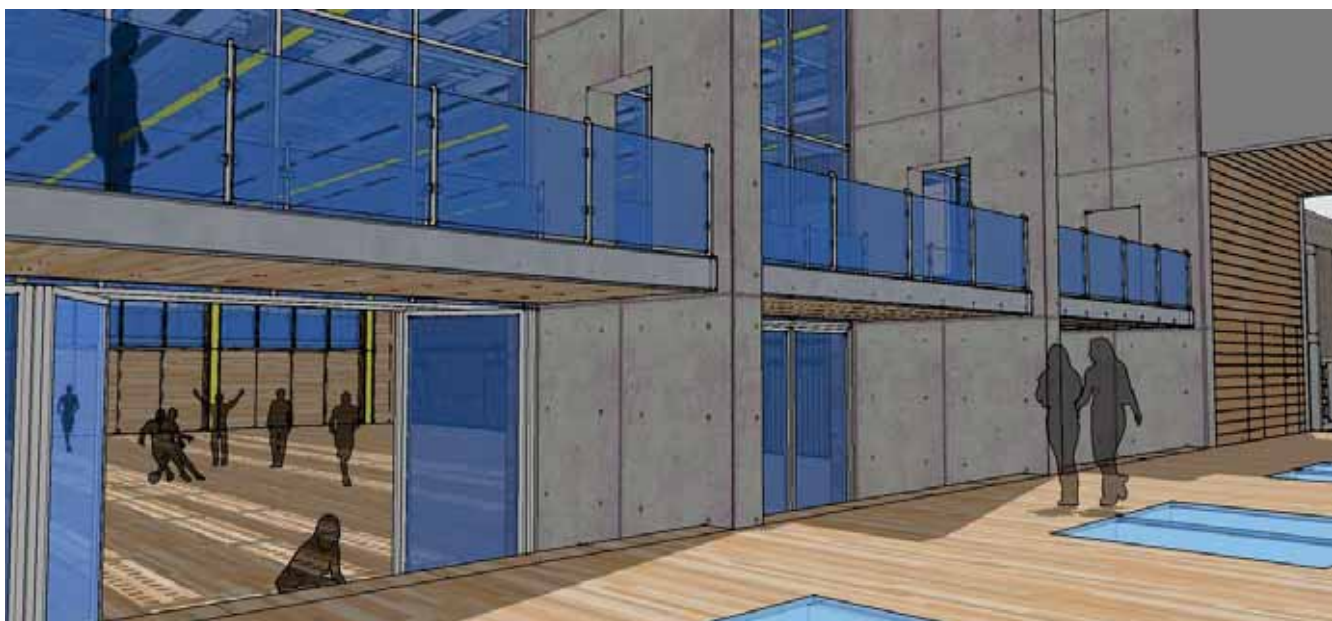
In both atria this secondary program is setup in such a way so as to orient the two atria at one another and towards the central street that discloses them and physically connects to the rest of the neighbourhood.

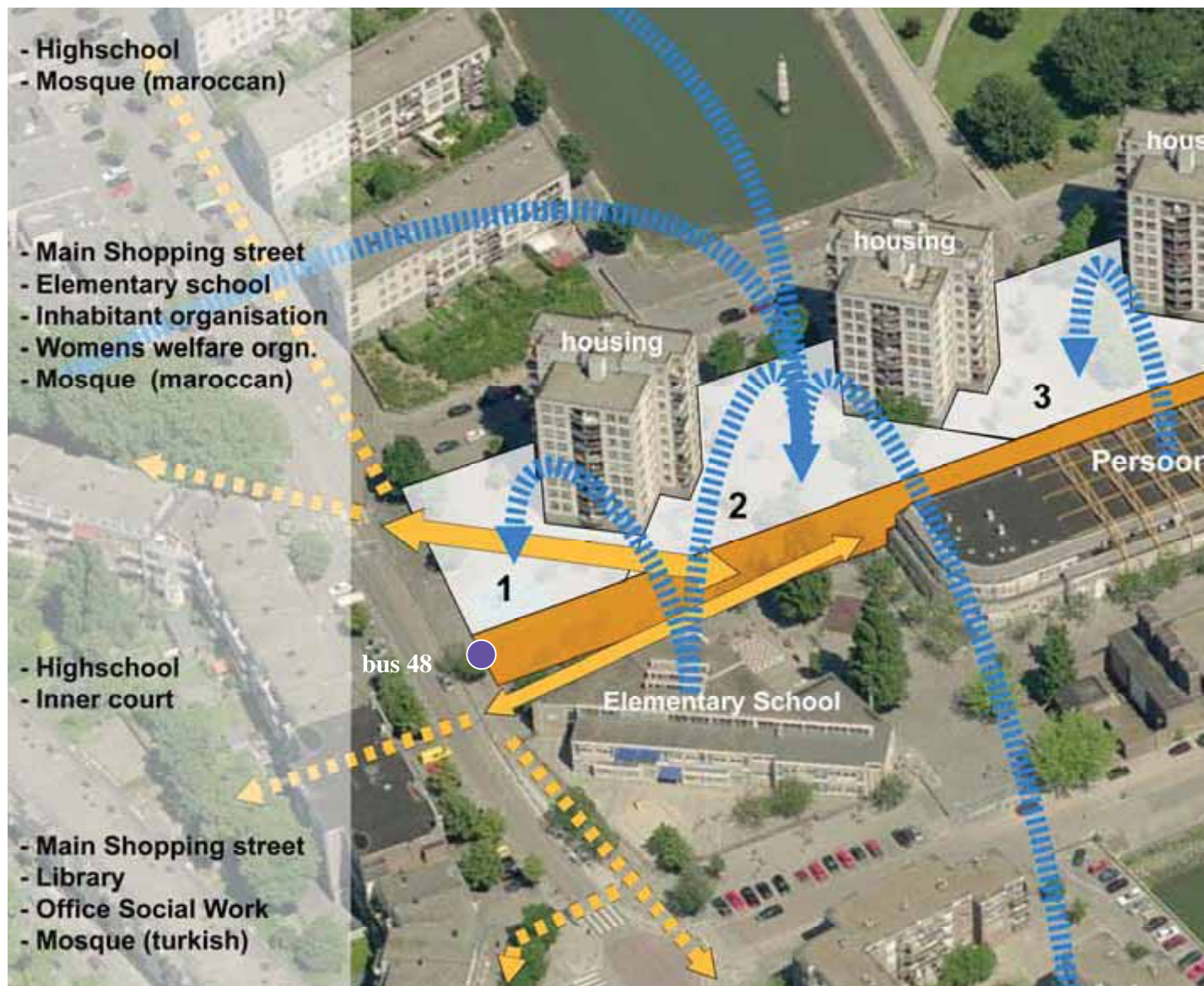
Summarized Program overview, new building (PVE):

Atrium 1	= 1220m ² and 10440m ³ (old hall = 937m ² and 6232m ³)	Dressing rooms (str.)	= 8 x 26m ² 4 x 13m ²
A1; Installations	= 2x 163m ²	Fitness area	= 110 m ²
A1; Extra storage	= 85m ²	Fitn. dressingrooms	= 2x 67m ²
Atrium 2	= 542m ² and 3252m ³	Fitn. storage	= 63m ² + 10m ²
A2; Installations	= 2x 34m ²	Fitn. intallations	= 59m ²
A2; Storage (incl.)	= 2x 73m ²		
A2; Cantines (incl.)	= 2x 73m ²		
A2; Sanitary/Kitchen	= 40m ² + 67m ²		

See the appendix for an overview of the old building.

The concrete slabs combine with the overhead boardwalk to form informal entry portals to the atria. Depending on the period and the theme of the behind lying program these portals can be dressed in such a way that they form interest sparking preludes to the activities.





source: <http://www.rotterdam010.nl>



source: Historische Atlas van Rotterdam (2004)

The square and its composition

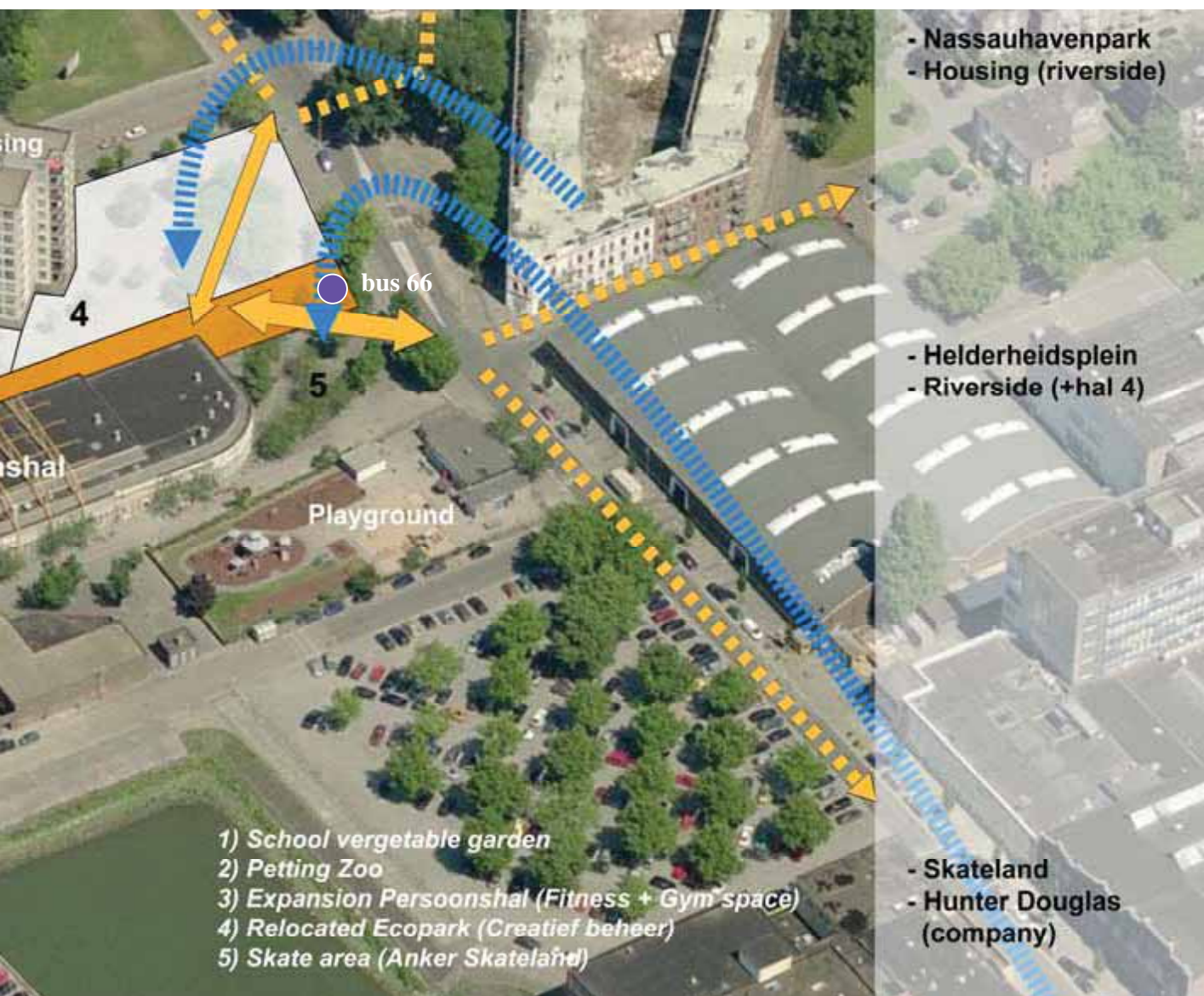
The street (orange) plays a vital role in organising the composition of the square. This street however should not be seen as a mere blatant organising element.

For, like the inherent quality of the hall is used to augment its design, so does the street also play into an inherent quality of the square.

To view this inherent quality or character, one needs to go back to when Feijenoord was still an industrial harbour area. Here one finds that the square which is now so unstructured once possessed a strong organising element; a traintrack for industrial cargo transport.

Thus, as this element in the form of a track used to be a strong compositional element of the industrial program; so it now becomes a strong organising element for the social program, in the form of the street.

In addition to creating structure this street, along with the existing buildings, also creates a frame for new zones of program.



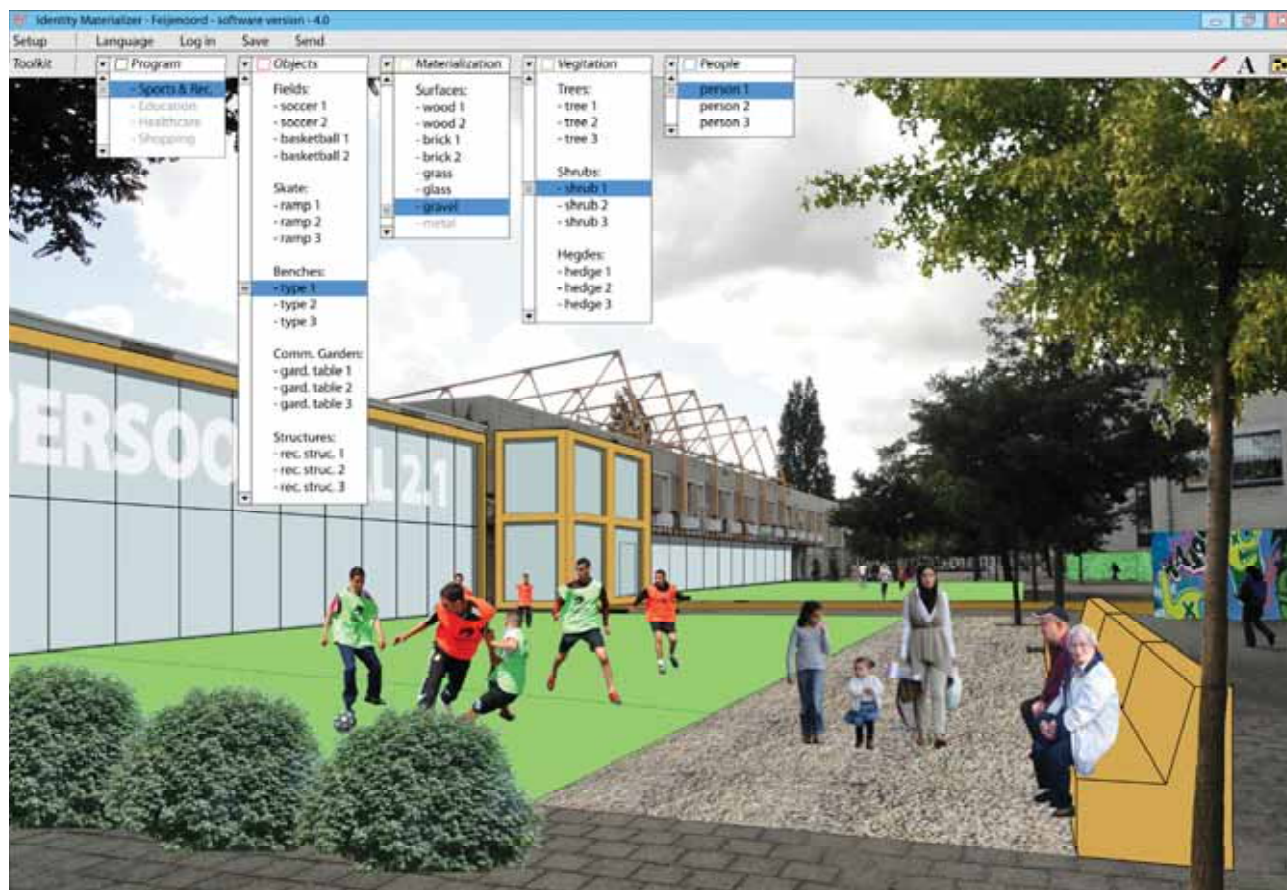
One of these zones is that of the School Vegetable garden (1). A program for which the elementary schools previously had to go to the neighbourhoods of Charlois and Vreewijk. Another zone (5) is reserved as an anchorpoint for Skateland that is originally located in midst of industry to the south of the neighbourhood.

As stated before, the street not only links such programs to each other, but it also connects (via diagonals) to the rest of the neighbourhood. Thus the link is also made to the other programs and the other nodes. The linking however doesn't end there. By slightly moving two nearby busstops to the streets' ends, one also enables a direct/easier connection of this node to the Zuidplein shopping mall of Rotterdam Zuid and the SoZaWe bureau (Social affairs and Employment bureau) of the district Greater Feijenoord.

Thus the node not only becomes a flexible programmatic node for a variety of socio-cultural activities, but it also becomes a traffic node, thereby further adding to the active social network by stimulating the occurrence of the chance incouter and interference.



source: <http://schooltuinridderbos.weblog.nl>



Actively developing the flexible zones within the frame:

As the street and the existing buildings create a frame, the exact infill and materialization of the zones remains flexible. This flexibility allows for a custom made infill so as to better address the various interests of the inhabitants. As stated in the paragraph “The Active Social Network” one can also put these zones at the disposal of the inhabitants in an active way. More specifically, ‘joint decision making’, but also active physical participation in materialization are to be the methods by which the zones are developed. In doing so the inhabitants are not only enabled to develop the environment that they are currently not fond of, but they are also stimulated to develop it as a community.

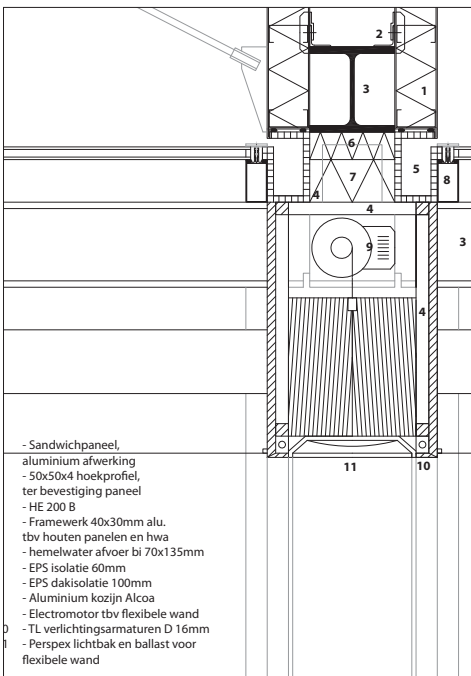
A specific method by which to develop the zones can be that of the digital toolkit, see image above.

kengetallen woonomgeving

		% wijk	% Rotterdam
schoon en heel (score: probleem)			
buurtprobleem vervuiling op straat		56%	36%
buurtprobleem hondenpoep op straat		45%	35%
buurtprobleem vuil naast container		63%	38%
buurtprobleem wildplassen		25%	19%
buurtprobleem bekladding muren		24%	17%
vernield kapot straatmeubiliar		21%	13%
overlast van groepen jongeren		31%	20%
tevredenheid met buurt			
tevreden met de eigen buurt		57%	73%
tevredenheid openbaar groen	probleem	4,3	4,9
tevredenheid recreatief groen	probleem	4	4,3
tevredenheid over speelplaatsen	probleem	4,6	4,9
thema aedequate voorzieningen			
tevredenheid over buurthuizen pleinen	voldoende	6,5	5,1

bron: veiligheidsindex 2010, Jeugdveiligheidsindex 2010

Fig. - Kengetallen op het gebied van wonen.



Such decision making and active participation naturally needs to be coordinated from a certain point. This role can be fulfilled by the new main atrium of the Persoonshal.

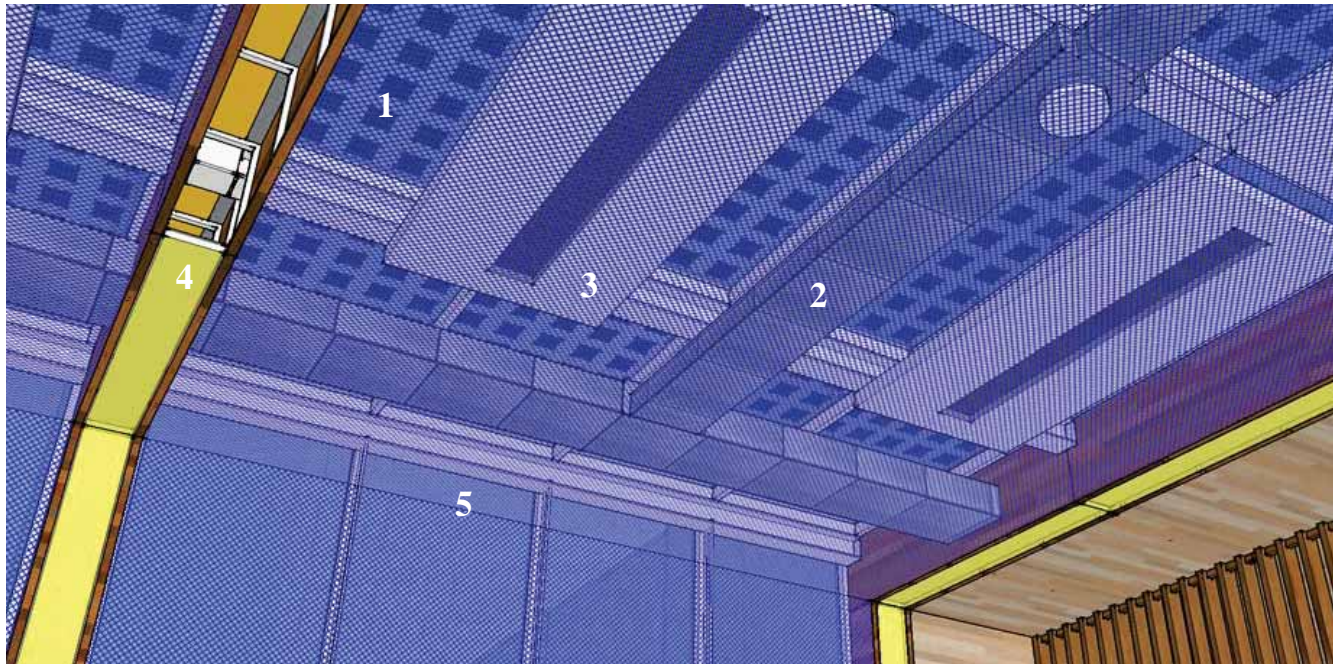
Having become the physical place for the intangible social network, it can now also function as the 'base of operations' so to speak.

Furthermore, as the persoonshal is augmented into a transparent and accessible atrium, the nature of joint decision making and participation will also have been integrated into its design.

Such integration can also be extended to the level of the detail. For example in the form of the flexible wall that partially divide the atrium itself into sub-zones for multiple programs, while at the same time providing a canvas/smartboard on which to project the toolkit.

In addition to such design related aspect there are naturally also organisational aspects. This relates to whom will actually lead the development of the zones and coordinate the inhabitants' efforts.

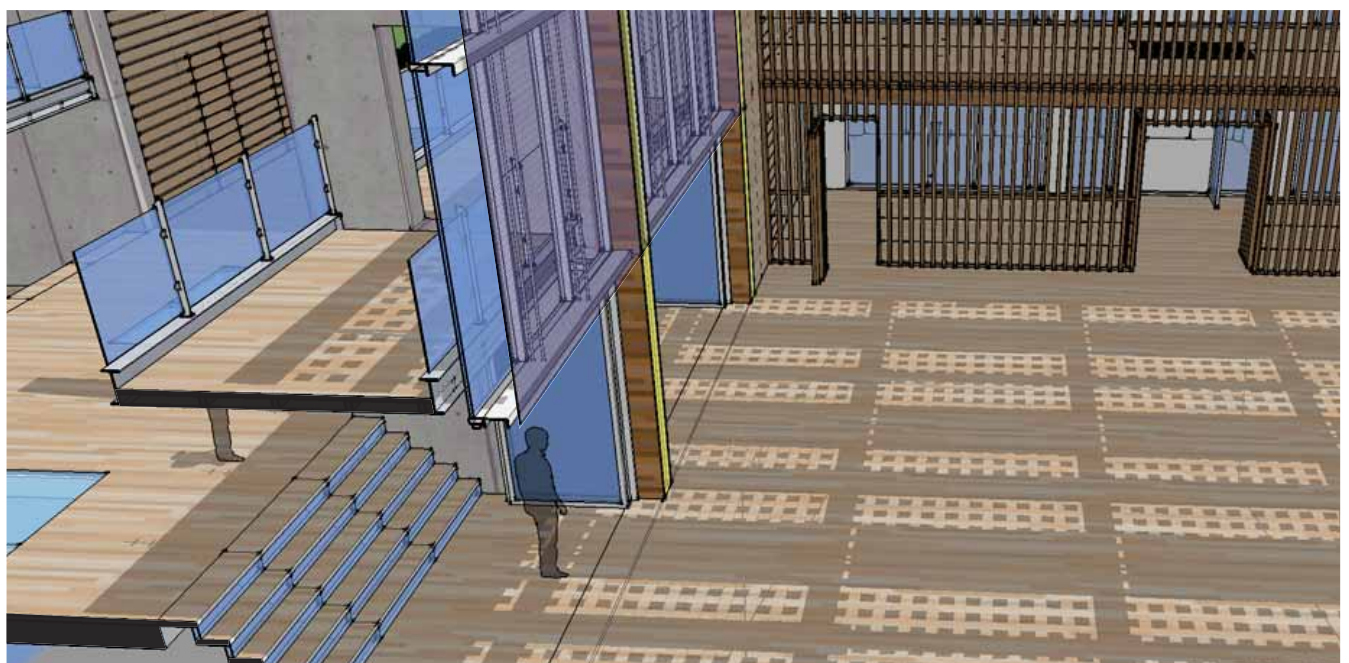
As discussed in the paragraph 'Active Aocial Network', such coordinators can be found in the form of currently active social workers; Creatief Beheer and TOS Thuis op straat. In time, as work progresses and the active network grows, the inhabitants can learn to take control of their own environment, as a community.

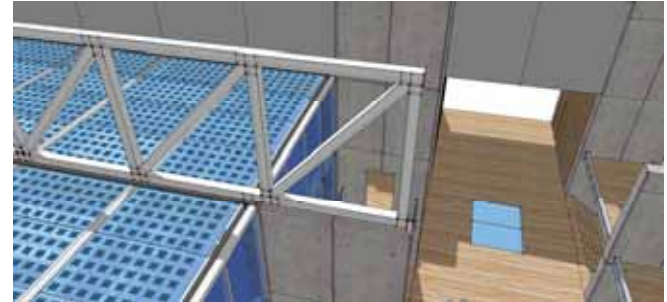
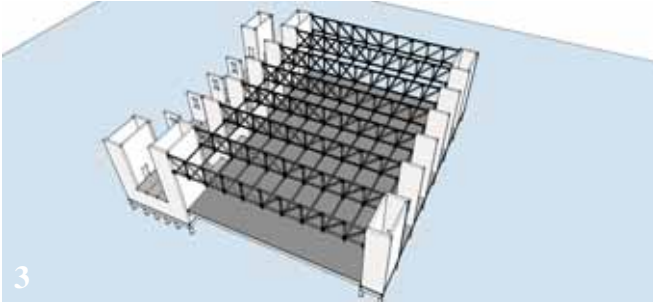
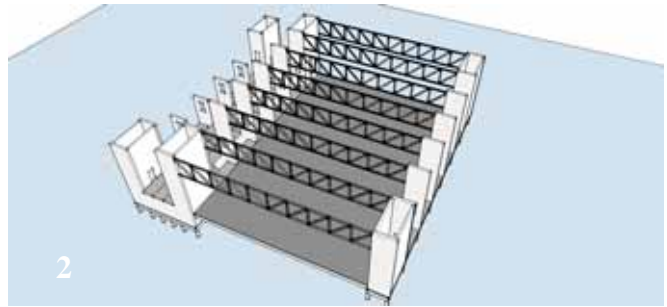
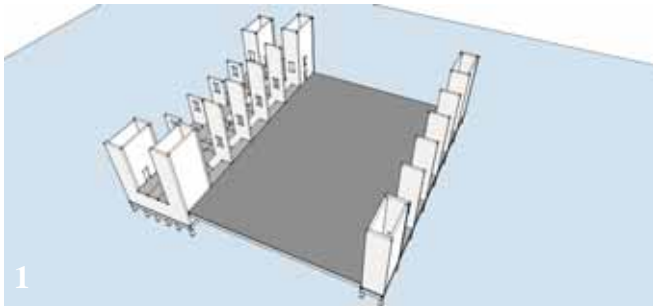


Shellzone

As discussed in the previous paragraphs the building's role in the context of the neighbourhood is to be a physical place for the intangible social network being created, reflecting its versatility, transparency and accessibility to all. We have broken this down into programs and we have touched upon the experience of the building. As discussed in the previous paragraph we can however also zoom into the details of the building and their role. One aspect was that of the flexible wall which also serves as a smartboard/beamer canvas.

This flexible wall is in actuality part of a larger building structure, 'the shellzone'. In this shell type of zone a series of installations and other elements is incorporated. As such, the actual space of the atrium can be kept free and maximum flexibility is maintained, while the installations provide their services and a pleasant climate from their specific zone. How these installations are interlinked is discussed in the chapter 'Powerschematic'. For now it suffices to state that the shellzone consists of: 1) an outer facade of HR++ glass with PV cells (156x156mm); 2) Installation ducts for ventilation and airconditioning; 3) radiator panels for heating (lighting included); 4) Flexible/retractable walls to divide the space (mood/nightlighting included in rim); 5) a steel mesh net (20x20mm) that closes off the zone and protects the installation from impact by balls and other objects.



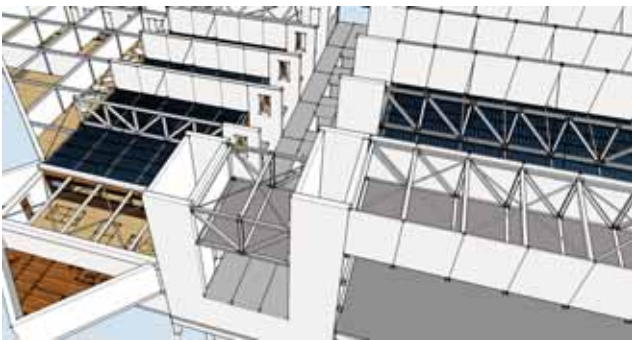


Construction and Stability (See also Posters)

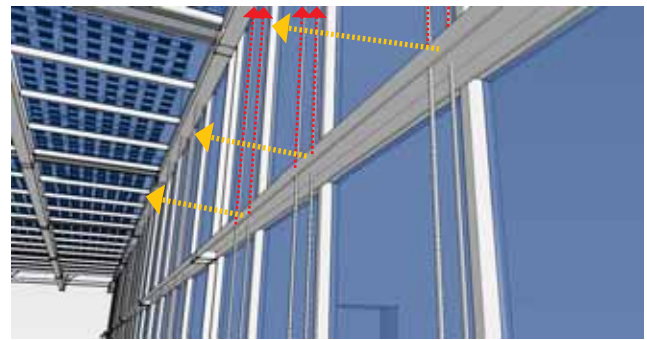
The shellzone is suspended from the main construction of the atria. Taking the main atrium as an example, we can visualize this construction in a few steps. Step one naturally is the laying of the foundations. These consist of steel reinforced concrete beams 700x500mm. On top of that lies a floor of pretensioned canalplates (kanaalplaten) singlefield 1x1x6000x1200x200mm. This is then topped off with 50mm poured concrete layer. To the sides 3 series of 8 prefab slabs (400x3100xvarying height) are erected. These will function as the columns.

In step two a 3 meter high truss consisting of HE 200B profiles is lifted on top of the two series of slabs of the main atrium. Eight of these trusses span 28,8m. The ends are capped with 100mm thick concrete slabs.

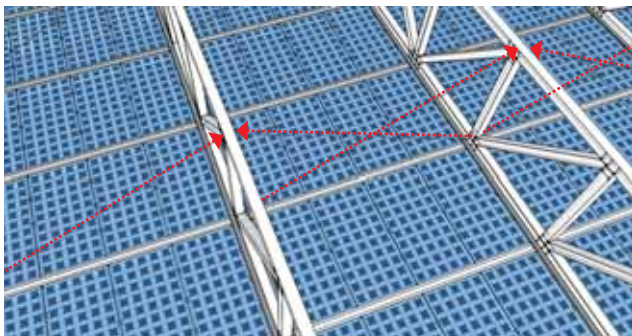
In the third step a series of HE 200B girders links the bottom part of the trusses thus creating the structural platform for the roof and the upper part of the shellzone. In the vertical plane (the facade) UPE 200 profiles form the supports for the facade. Here the active forces are lower plus a more slender profile is desired with respect to the transparency. In step four the outer parts of the shellzone can be added and the main setup is finished.



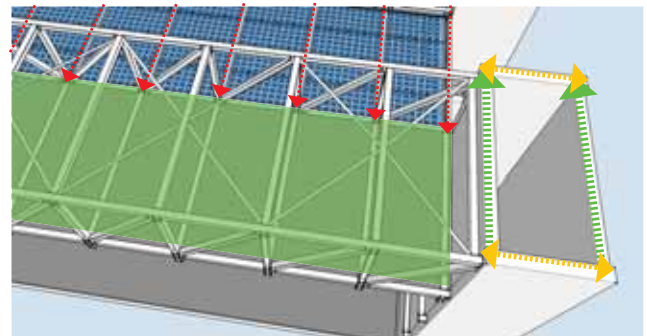
A; The system used in atrium 1 is also applied to atrium 2



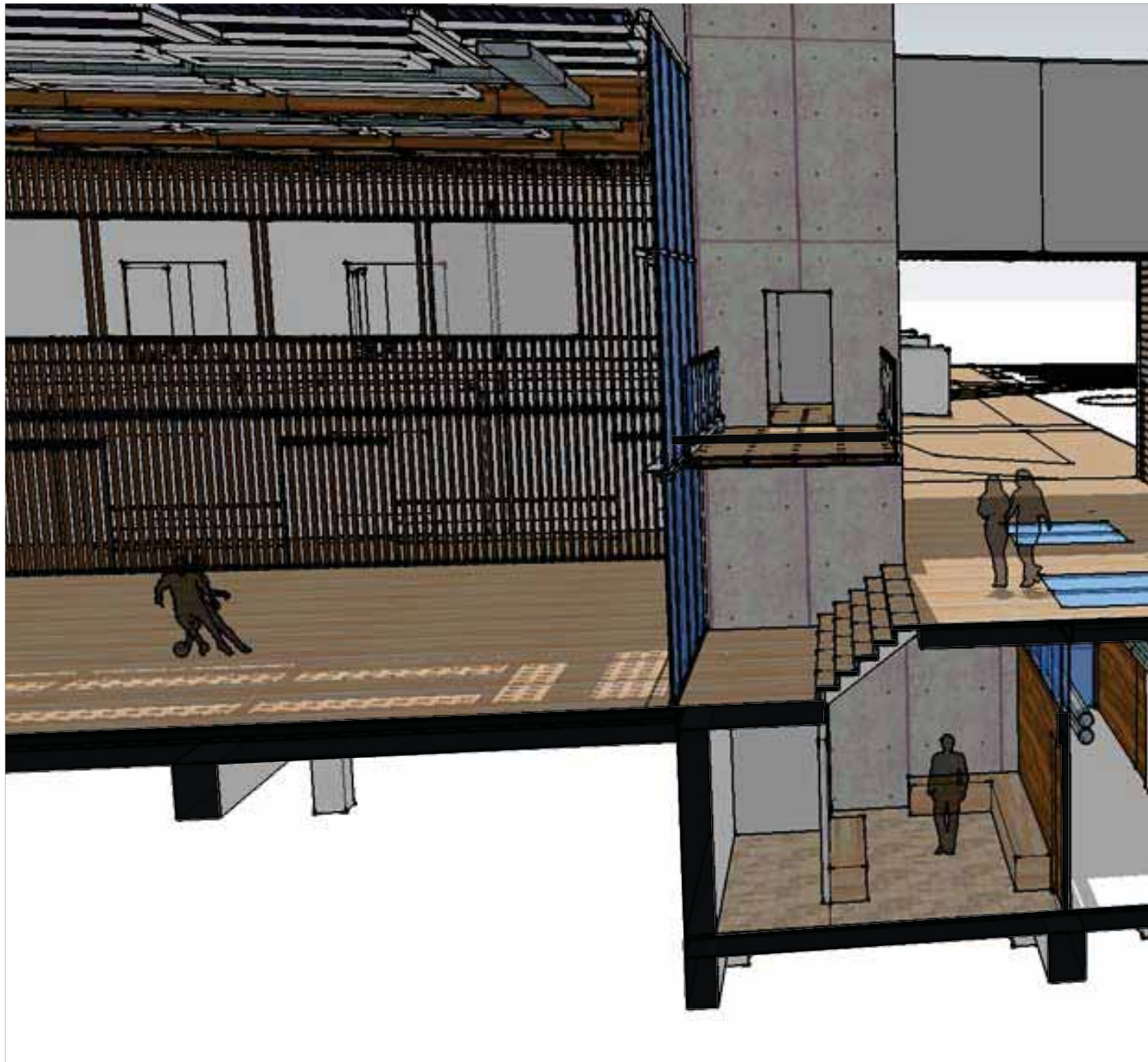
B; UPE 200 and D16mm cables hold and stabilize the facade



C; Trusses are kept from buckling by 16mm tension rods



D; longitudinal windforces are countered by the tubular structure formed by the floor and the windtrusses in the final two fields. The forces are directed to the foundations via the cores

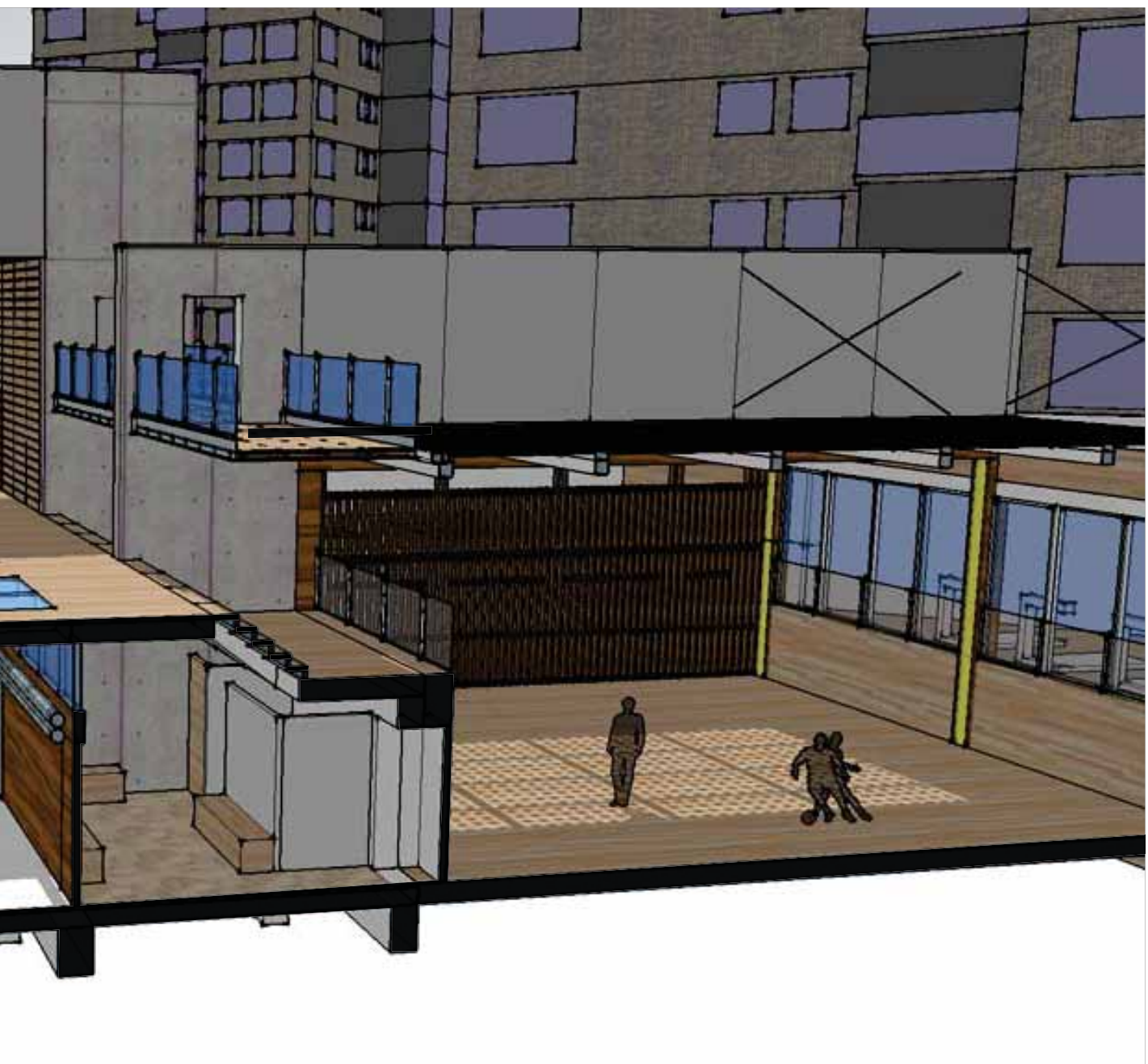


Additional: Construction to Street

The large concrete slabs not only serve as structural loadbearing elements, but they also play a role in the experience of the street. Here the series of 8 slabs form an arcade, that is turn functions as the transition zone from street to atrium.

Underneath the street the slabs continue. Here slabs of atrium 1 and 2 meet in a series of walls. These walls form the loadbearing structures for the dressingrooms underneath the street. A 2 meter wide hallway provides access to the dressingrooms via the 4 cores. Of these four cores two contain a spiral staircase and a lift (shaft 2800x2400mm), the two other cores contain a staircase.

Keeping the lower walls at a thickness of 400mm and spanning massive floor elements (255x1200x6000mm) over them makes it possible for occasional heavy transport to pass over the street. This can include a supply truck and a firetruck.



Phasing

In terms of phasing, the extension that is atrium 2 will have to be realised before atrium 1. Doing so will enable the capacity of the total middle section to rise to 200%. When this capacity is reached work can begin on one half of hall 1. This will cause capacity to drop again to 150%. When this first half of atrium 1 is completed the process can then be repeated for the second half.

In applying this phasing the capacity is kept above 100% of the original capacity of the Persoonshal, throughout the augmentation/realisation.



Fitness

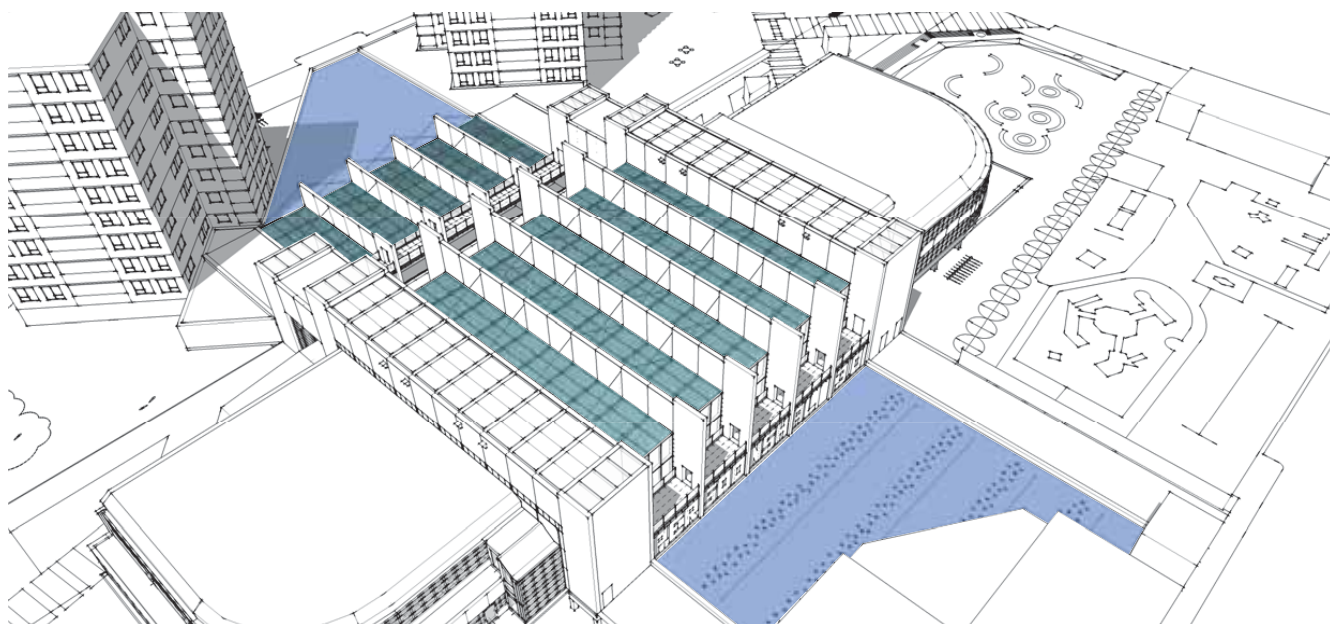
As explained in the paragraph 'Program' the atria are oriented towards each other and the street via the setup of their secondary programs. In the expansion segment this secondary program consists of the Fitness-program. However, this program is not located here for the sole purpose of orienting the atrium.

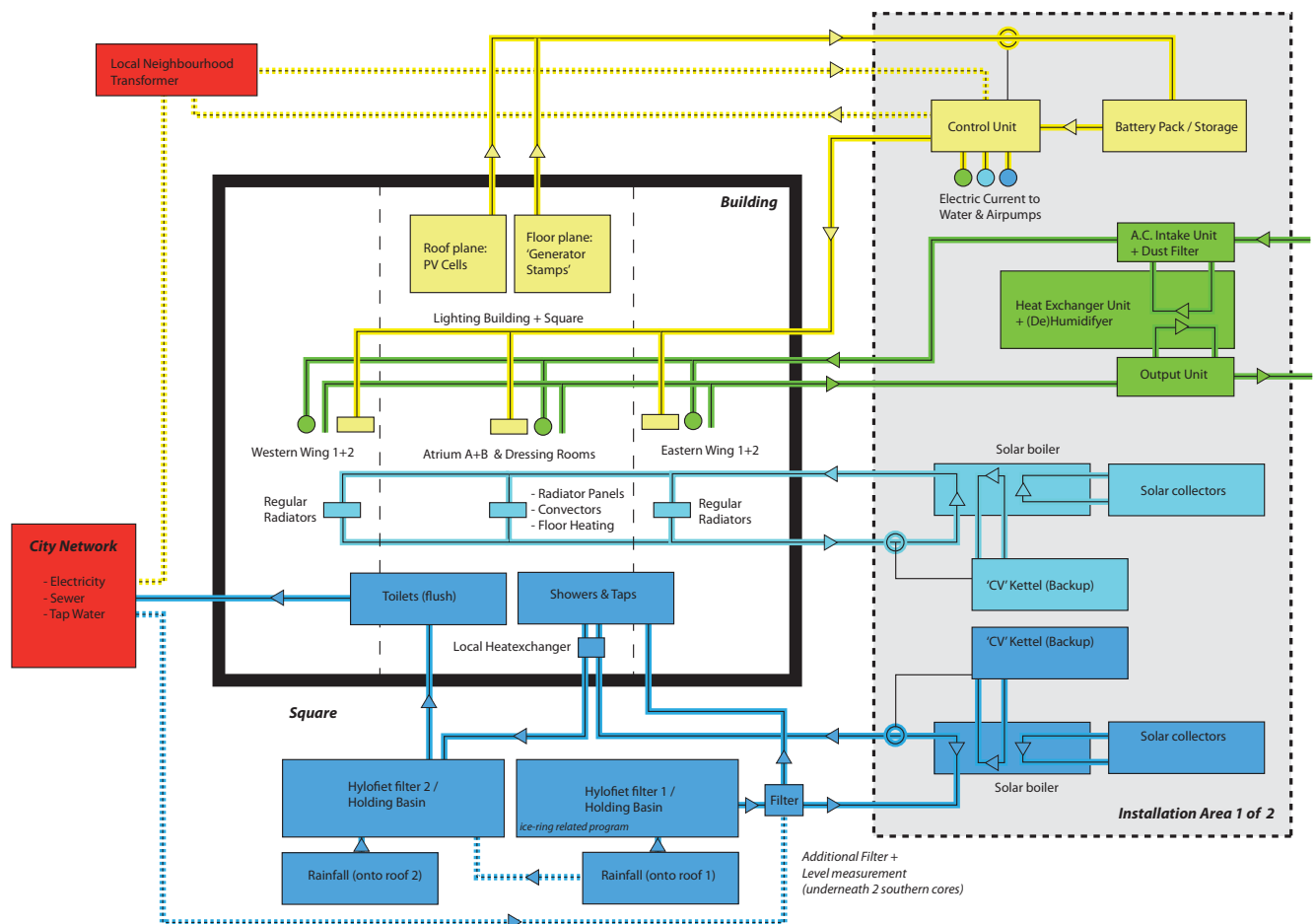
For positioning the fitness facility here, 12 meters away from the busy street, also decreases the need to stick the inner facade shut with translucent bands. In addition the people active in the fitness facility are provided with a view on the activities taking place in the secondary atrium as on those in the primary atrium.

If desired, this position of the fitness facility even enables it to function independent from the atrium, with its own entrance.

'Helofiet'-filters

Located above the fitness facility one finds a large 'helofiet'-filter basin (448m²x500mm) which purifies the rainwater that falls onto the glass roof (and the filter itself) and the used greywater from showers and sinks. This water can then be filtered for use in secondary water systems such as that of the toilets. From where it is discharged into the city sewer system. A 'helofiet'-filter is also located to the south of atrium 1 (552m²x500mm). How both filters are inter-linked with the buildingwide systems is depicted in the following paragraph 'Powerschematic and Materialization'.





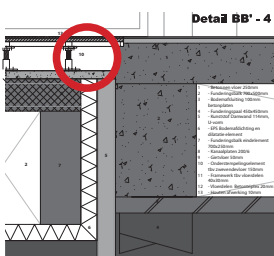
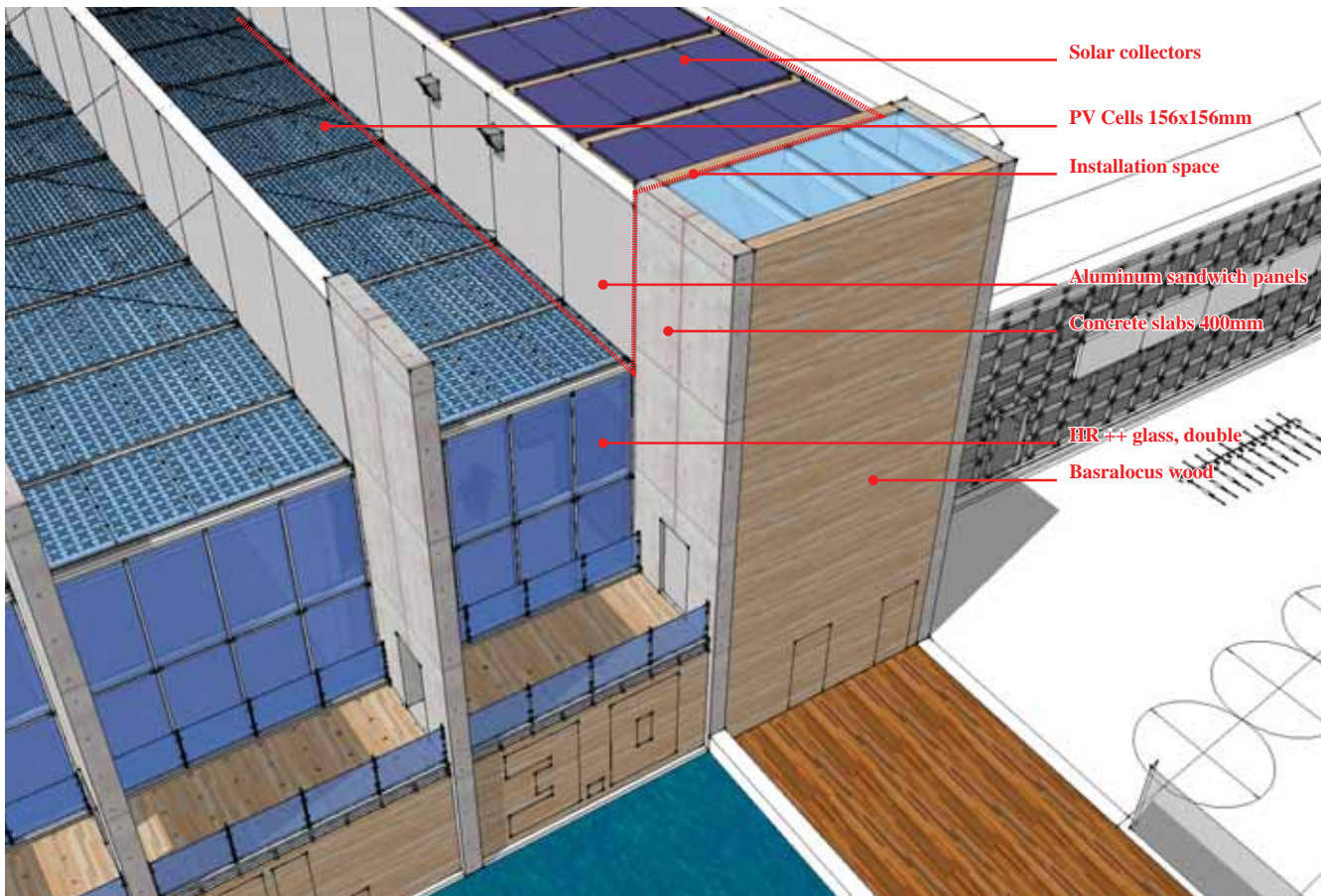
Power schematic, Installations, summarized energy Calculations, Sustainability and Materialisation

As discussed before, a wide range of installations form an interlinked system that provide the building with its necessary water supply, energy supply, heating and ventilation and airconditioning. These are all visualised in the scheme above, in respectively dark blue, yellow, light blue and green.

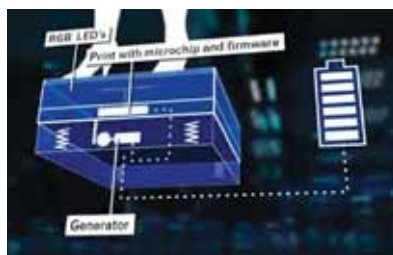
In this scheme we now see how for example the earlier discussed 'helofiet'-filters, form storage basins with a capacity of $1000\text{m}^2 \times 0,5\text{m} = 500\text{m}^3 = 500.000$ liters. Based on the data from 'Water Duurzaam in het Ontwerp' (2005) we can determine that this supply can facilitate about 333 visitors, which is a respectable number. In order to facilitate a larger amount of visitors during special events this watersystem is also tied into to City Network (Red). Heating of the water takes place in a specially reserved installation space. This is also where the water for the radiators is heated with the help of solar collectors and a 'CV' heating kettel that functions as a backup. Based on the 'Vademecum Energiebewust Ontwerpen van Nieuwbouwwoningen' (2000) we find that a normal household needs a collector of 3m^2 to facilitates its hotwater supply throughout the year. In the new atrium there are two zones that hold solarcollectors. Per zone a surface of $130,48\text{m}^2$ is covered. $130,48\text{m}^2 / 3\text{m}^2$ yields that one zone can facilitate 43,49 households (87 households with the total surface). Per household the Vademecum recommends a storagetank of 120L. $120 \times 43,5 = 5220\text{L}$ or $5,22\text{m}^3$ that needs to be reserved for the tank per installation zone. In the design this is facilitated in the form of two tanks per zone, with a capacity of $1,2 \times 2,4 \times 1\text{m} = 2,88\text{m}^3 \times 2 = 5,76\text{m}^3$.

In terms of airconditioning and ventilation, the old hall used to be 5965m^3 large and serviced by an installation space of $4,8 \times 30,2\text{m} = 144,96\text{m}^2$. The new atrium is 10440m^3 and is serviced by two zones with a total capacity of $2 \times 5,65 \times 28,8\text{m} = 325,44\text{m}^2$. Thus the atrium zone has become 1,75 times large, but its servant space has even grown with a factor of 2,24, which puts the setup in the green. With the old ventilation speed being $10.000\text{m}^3/\text{h}$ the old building was able to completely refresh the hall within 35minutes.

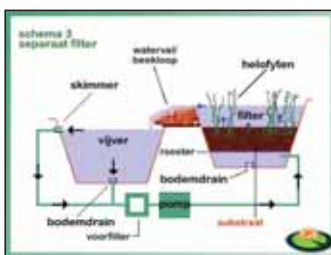
With the same ventilation speed, a serving zone that is 2,24 times larger and ducts that have a total section of $4 \times (2,3 \times 0,45) = 4,14\text{m}^2$ as opposed to $12 \times (0,2 \times 1) = 2,4\text{m}^2$, the building also scores in the green here. Thus the new design also becomes a far more effective setup in terms of installations.



Floorplane;
Generator stamps



Generator stamps; technique
source: <http://www.greendiary.com>



'Helofiet'-filters; source:
<http://tuincoach.wordpress.com>



Elements integrated into the planes
of materialisation (doors)

In terms of sustainability the building uses 'helofiet'-filters, but also PV-cells in its glass roof. These have a size of 156x156mm per cube. According to the data acquired from various manufacturers (among which Hermans techniek) a panel as applied in the building (2,7x1,4) generally yields 110 Wattpeak (Wp). The two atria combined count 300 panels, thus $300 \times 110 = 33000 \text{ Wp}$. With one household using about 4000Wp. The building's roof generates the power equivalent to that needed by 8,25 households.

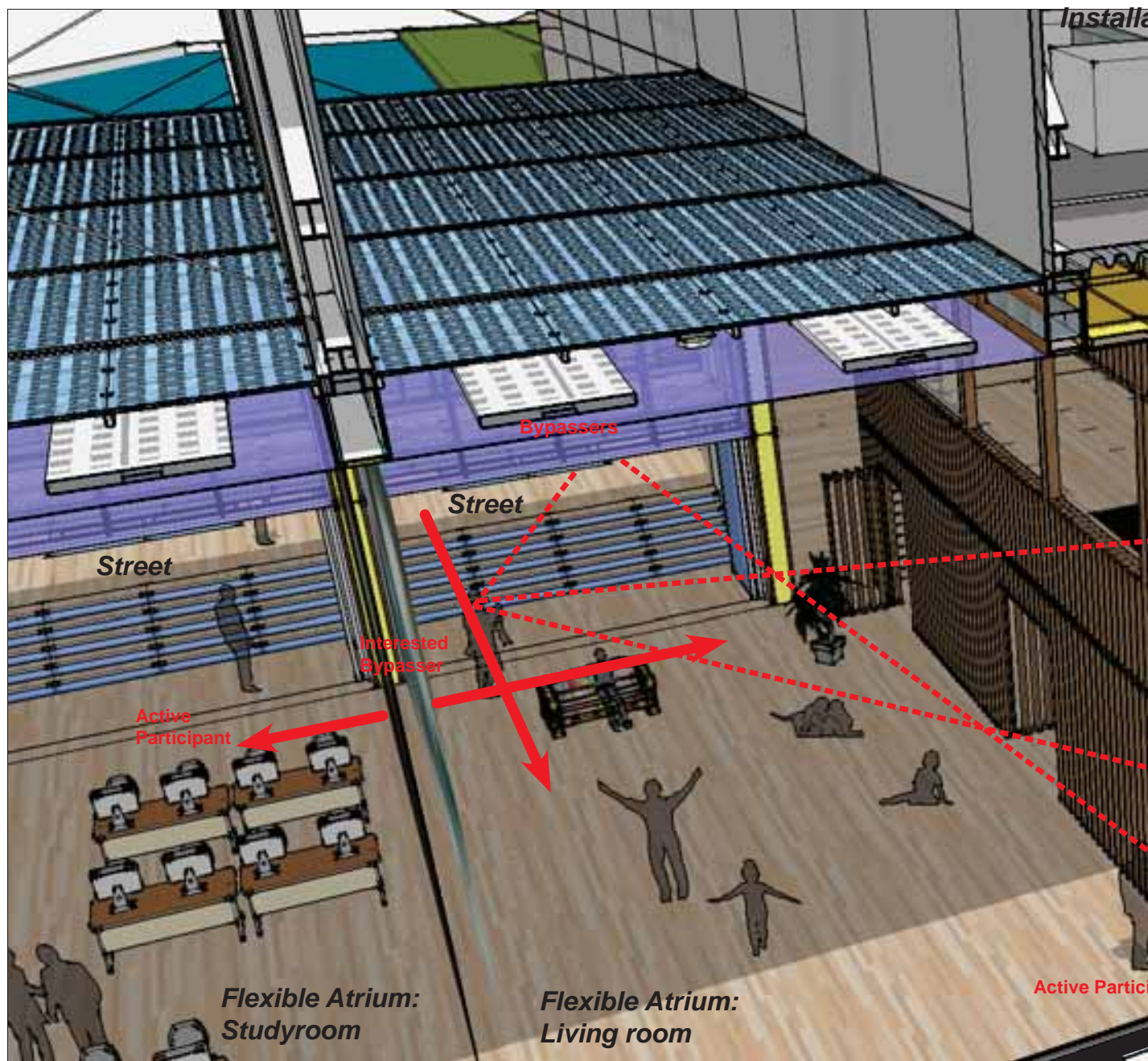
In addition to this powersource the buildings also generated power through its users. This is done via a raised floor that lies on top of a series of generator-stamps. This generate an electric current as the users produce vibrations while walking on the floor or during gym-classes.

All the power generated is rerouted back into the building's installationpumps and fans. Another part is used to illuminate the square via the buildings moodlights and the excess is sent out into the City Network.

In terms of materialisation the heavy loadbearing elements of the trusses are materialized in concrete and steel, covered by aluminum sandwichpanels (100mm). This enables one to materialize the zones in between the trusses with glass and wood. This yields transparency, accessibility and an enviting materialisation in between the trusses. Depending on the necessary function, the amounts of wood and glass vary.

The wood used is taken from the former local Persoons-harbour where one finds large dockingposts a.k.a. 'meerpalen' and 'dukdalven' from durable Basralocus-wood.

Thus in addition to a raised effectiveness, the installations and even some materials are also setup in a far more sustainable way.

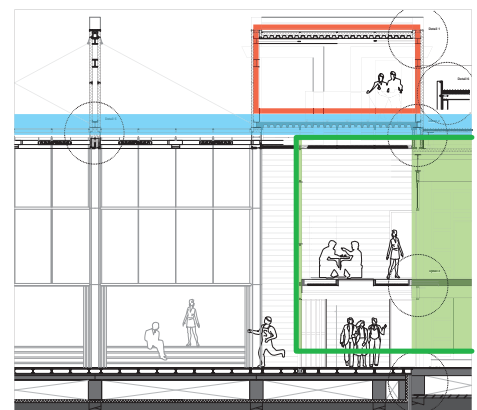


Segment and functioning

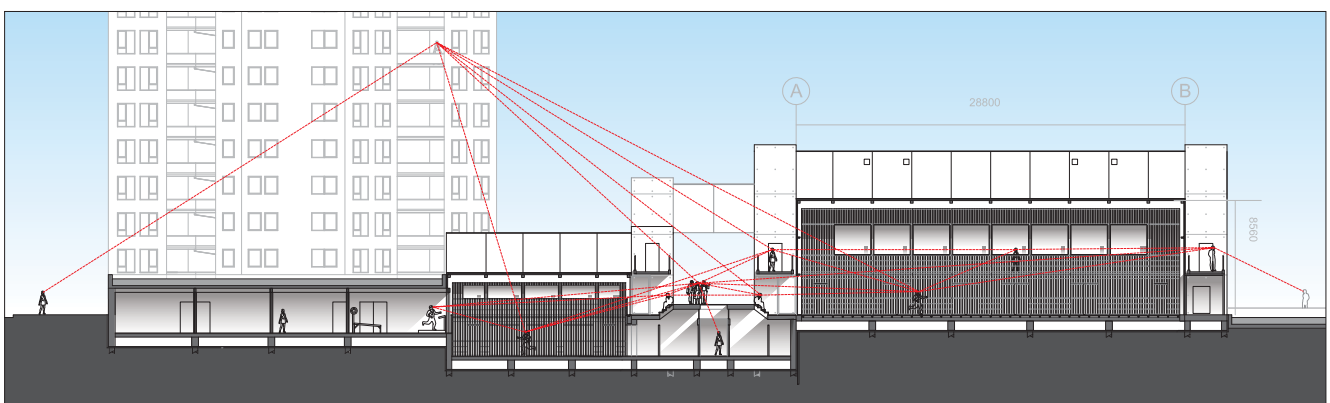
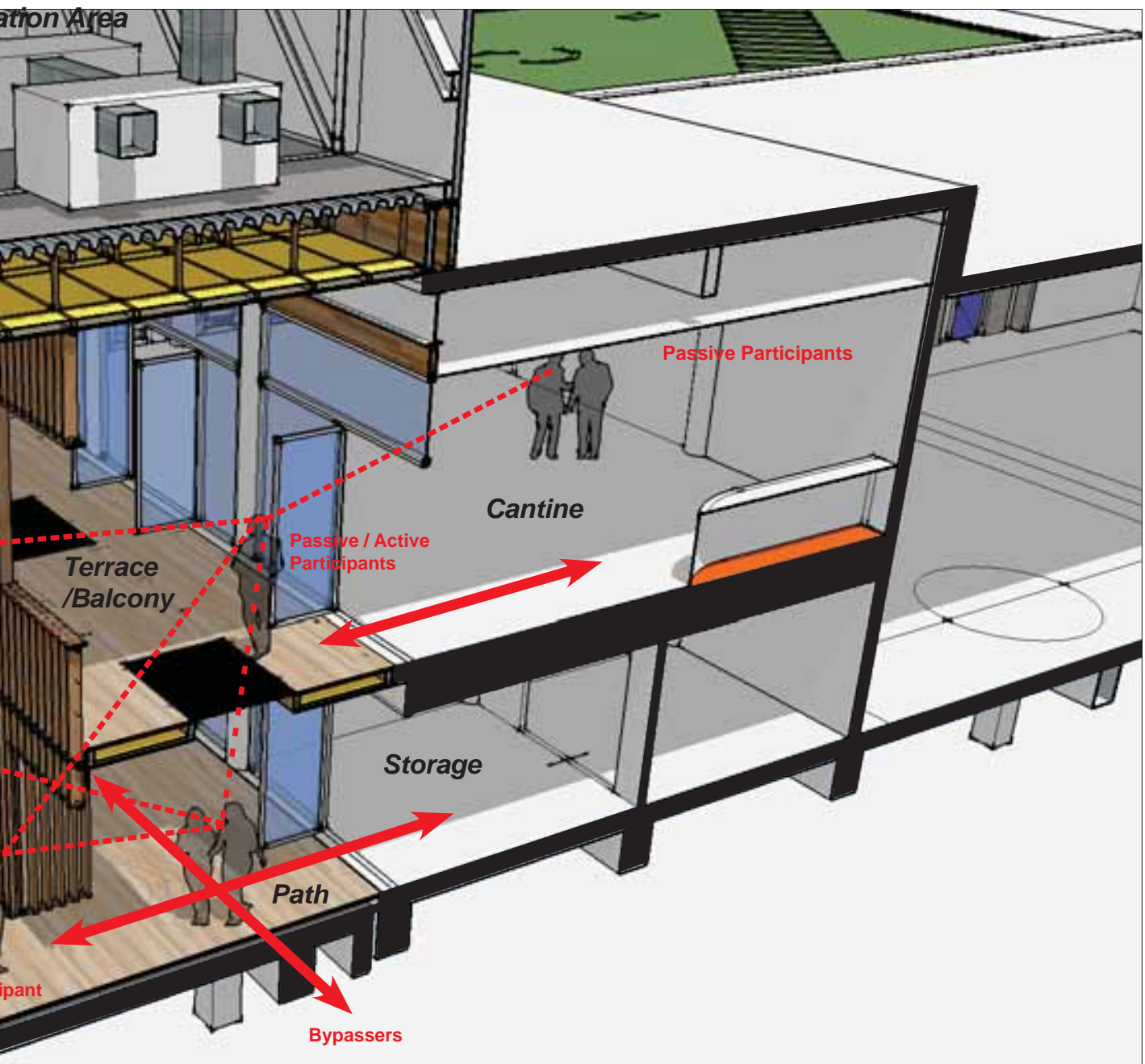
As explained in earlier paragraphs, the installations service the atria through a shellzone. It is also from this shellzone that the space dividing flexible walls drop down. In dropping these walls, 4 for each atrium, one is able to facilitate 4 individual programs per atrium.

These 4 programs/zones are interlinked via 2 routes that run along the inner side of the facade; 2,32m wide in the main atrium shown above.

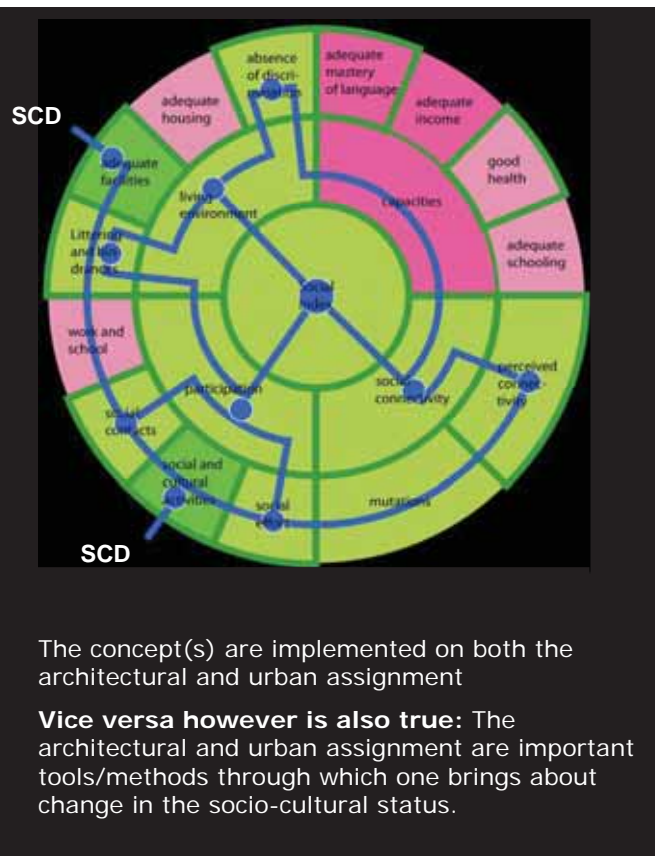
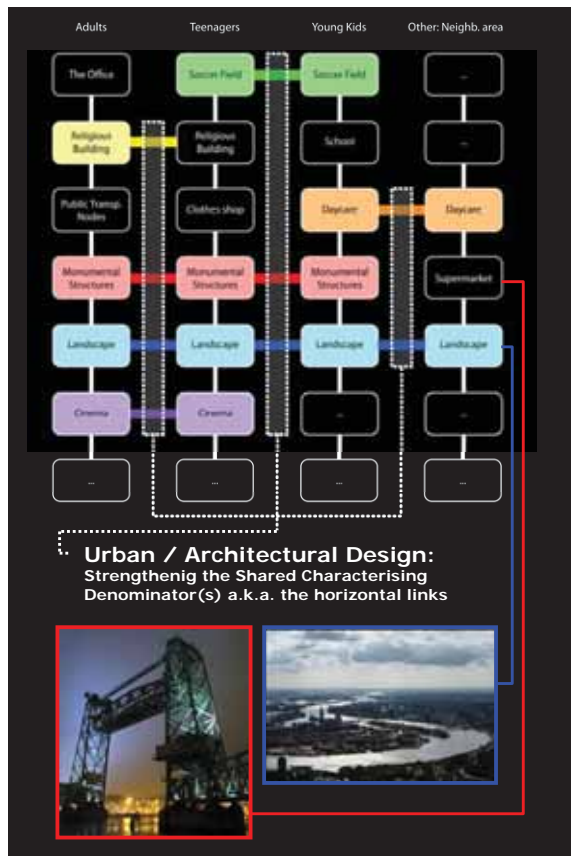
As depicted in the paragraph 'Program', the various routes are setup in an intersecting fashion, so as to stimulate interaction between the active participants and bypassers. Interaction through interference if you will. This is further strengthened through a series of broad viewlines, that have the added effect of creating social control.



Structure of the section



Broad viewlines and a transparent setup spark interest, stimulate interaction and create social control



Back coupling

Thus, the augmentation of the Persoonshal as a Shared Characterising Denominator (gemeenschappelijke noemer) into a community livingroom, yields physical place for the intangible social network being created, reflecting its versatility, transparency and accessibility to all.

This role of the building is integrated throughout the augmentation; from the concept all the way through to the structural aspects, orientation of installations and the like.

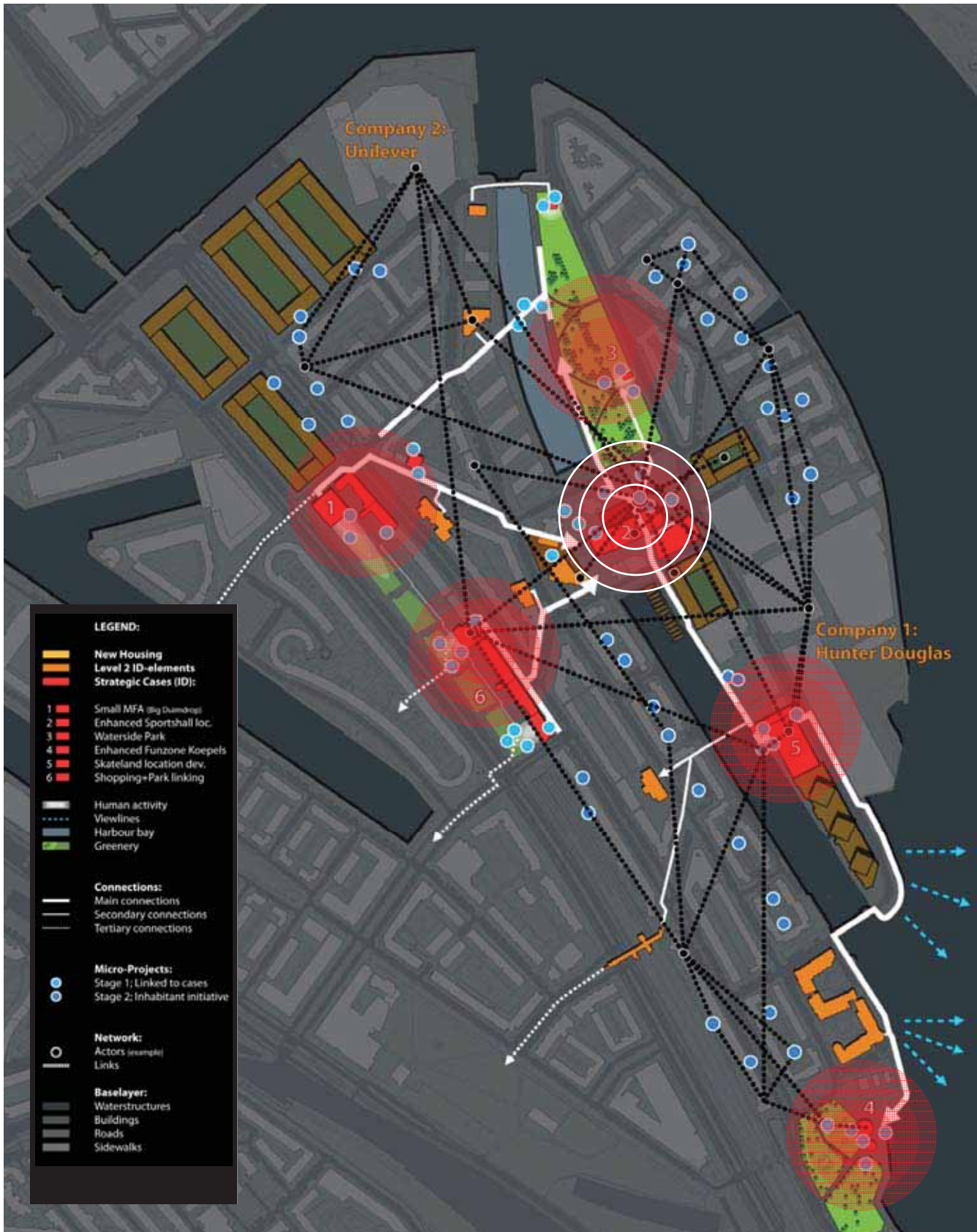
In the broader setup of the strategy, the building however doesn't stand alone. This new version of the Persoonshal (Persoonshal 3.0 if you will) forms but one node in a broader neighbourhoodwide network. Together these nodes serve as the focal points for the augmentation of the neighbourhood's environment as a carrier and major player in the inhabitants wellbeing.

Furthermore, by creating an environment that also stimulates the interlinking of the inhabitants' desires and interest one can also stimulate the interaction between these inhabitants.

This yields an intricate active socio-cultural network in which the various issues of the neighbourhood and its inhabitants are addressed via the inhabitants' inherent qualities, potentials and corresponding interest.

The result is a programmatic and physical network that stimulates the emergence and consolidation of a neighbourhood wide active socio-cultural network. This network functions as a net for the socially weak and unwilling, while at the same time fulfilling the role of a trampoline for those that are driven and ambitious. That is the power of the integral approach that utilizes inherent quality.

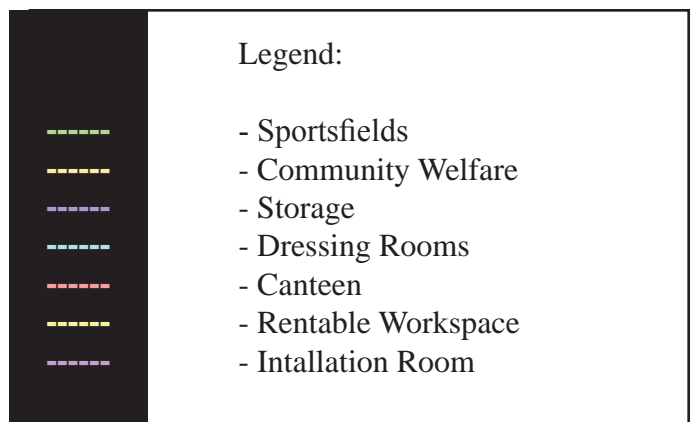
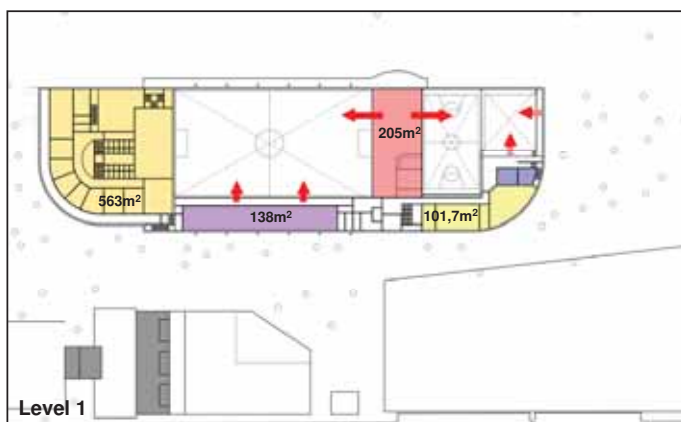
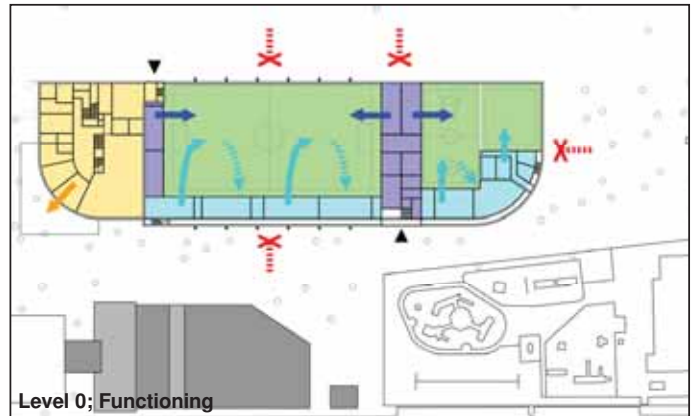
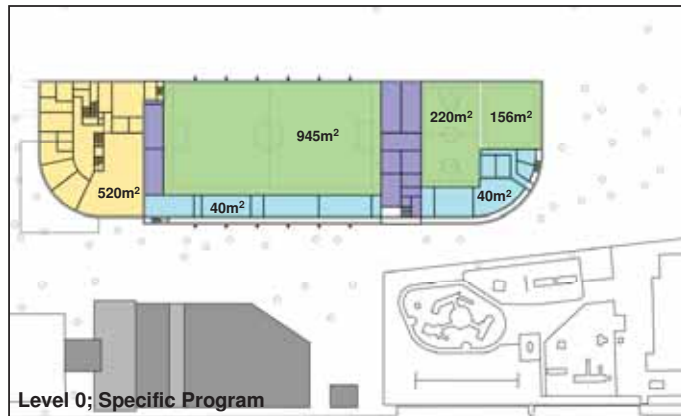
That is Materializing Identity.



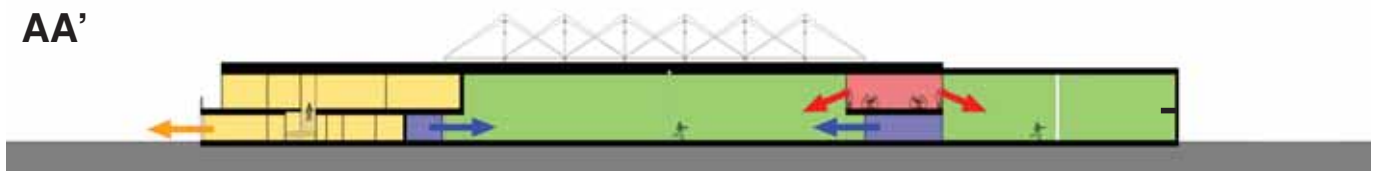
Appendix

Old Building Setup:

Floorplans, Program, Sections (P2 data)



AA'

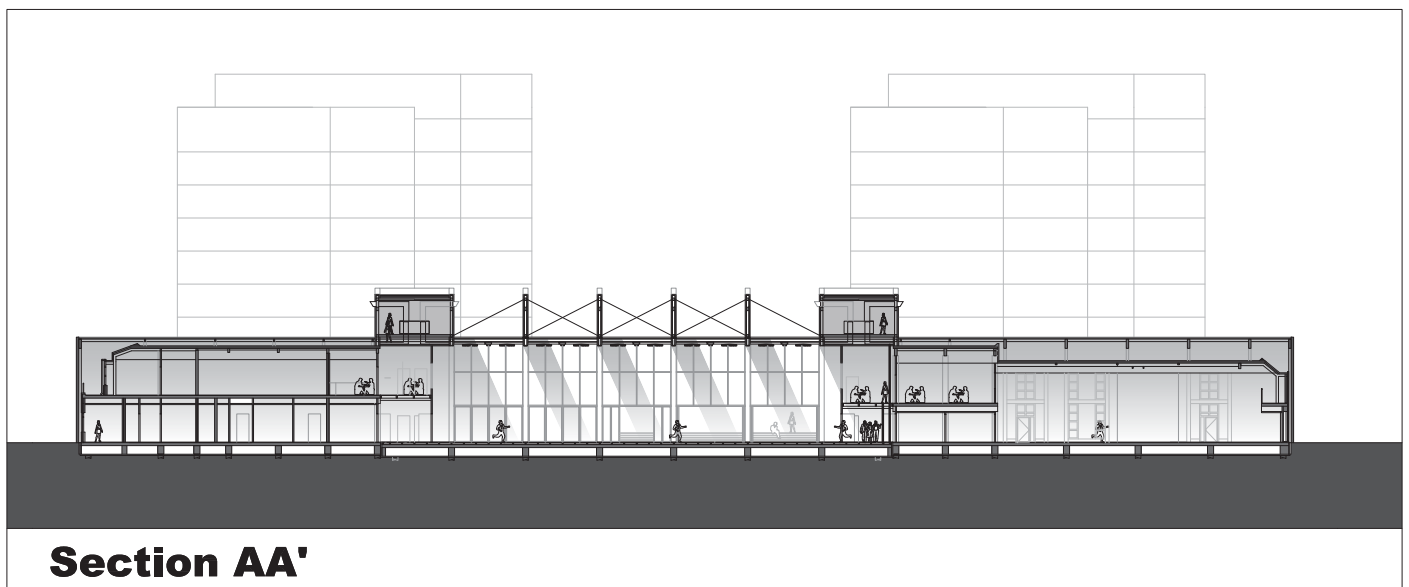
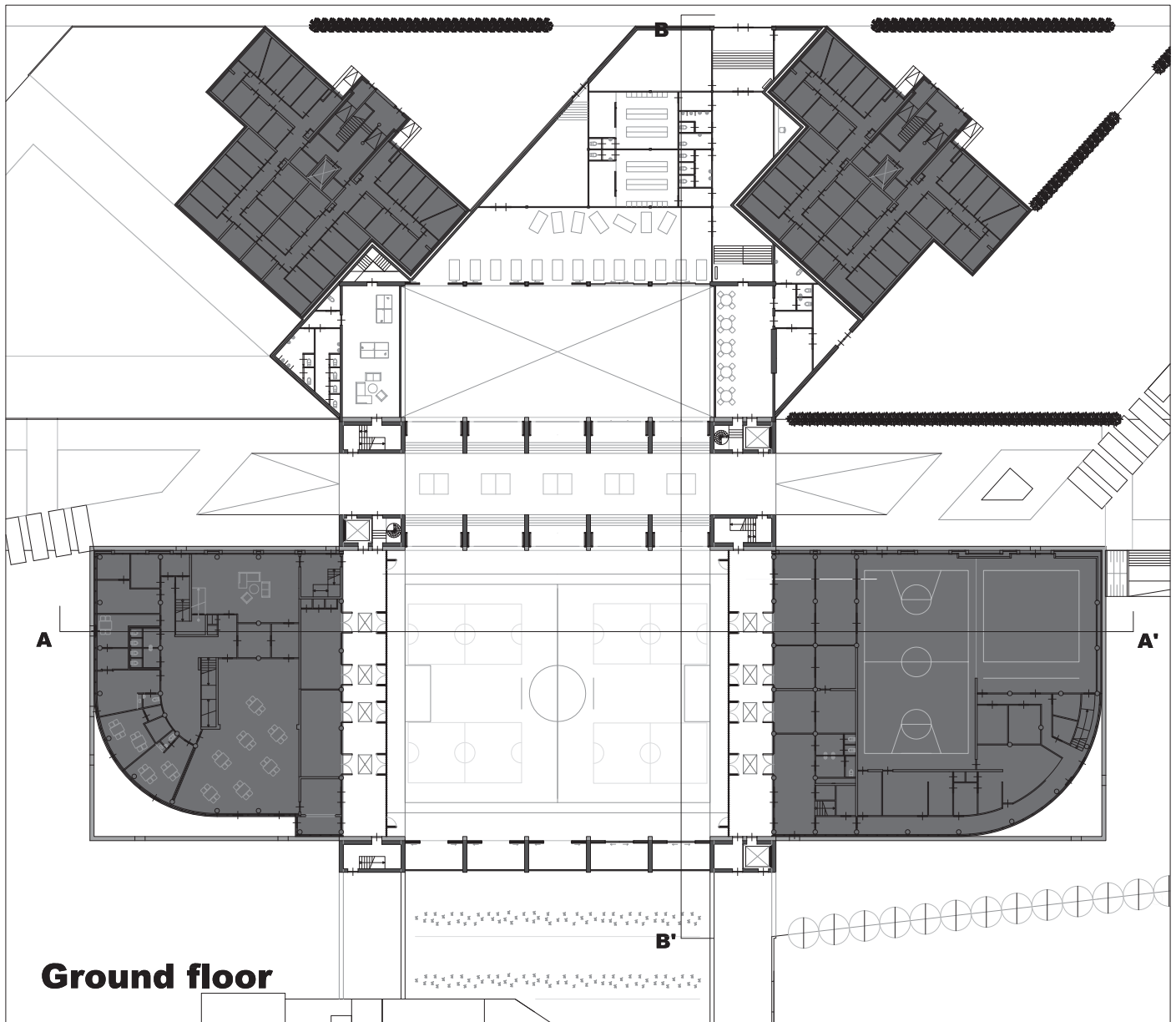


BB'

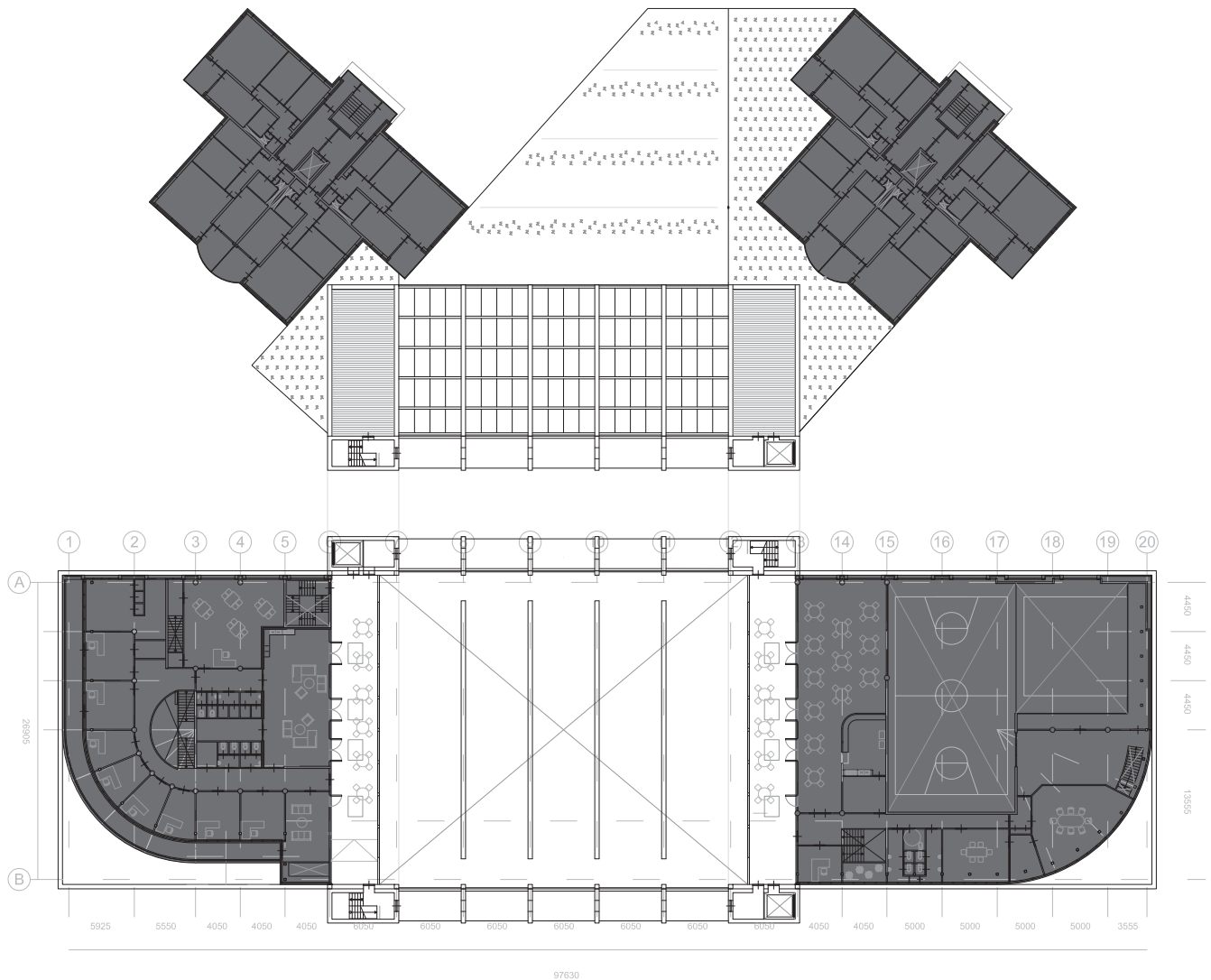


Materializing Identity

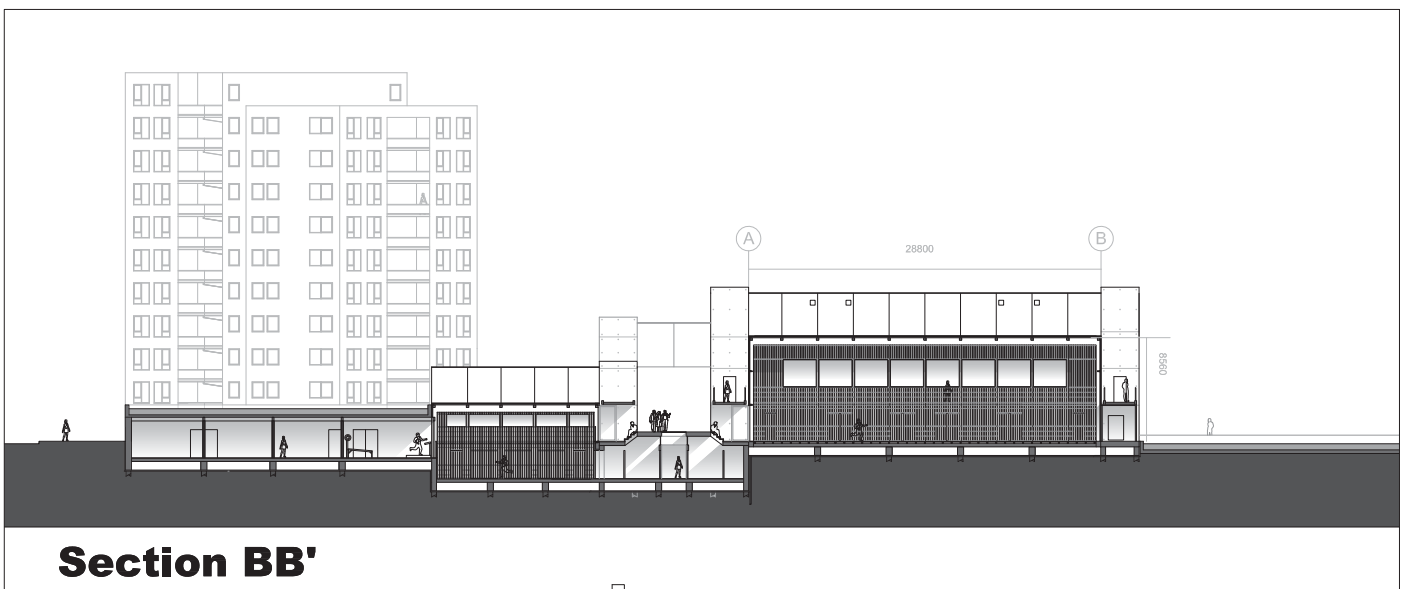
Allan Pinheiro 1276271



Floorplans & Sections 1:100 (print 1:200)



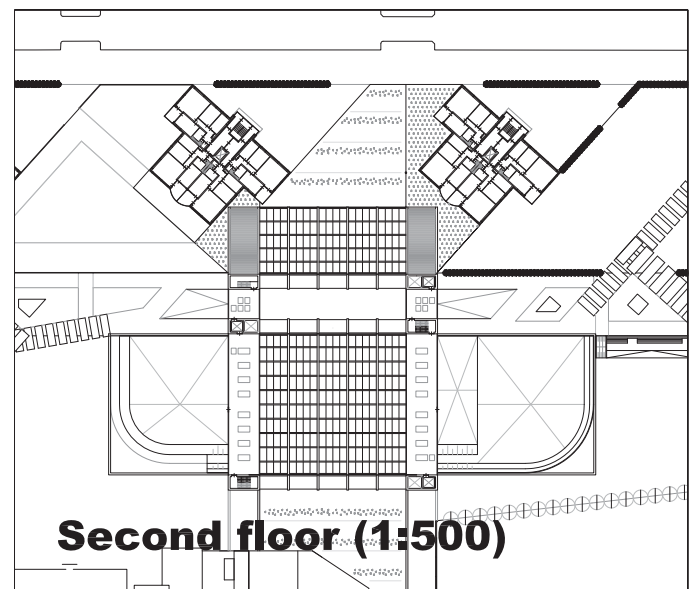
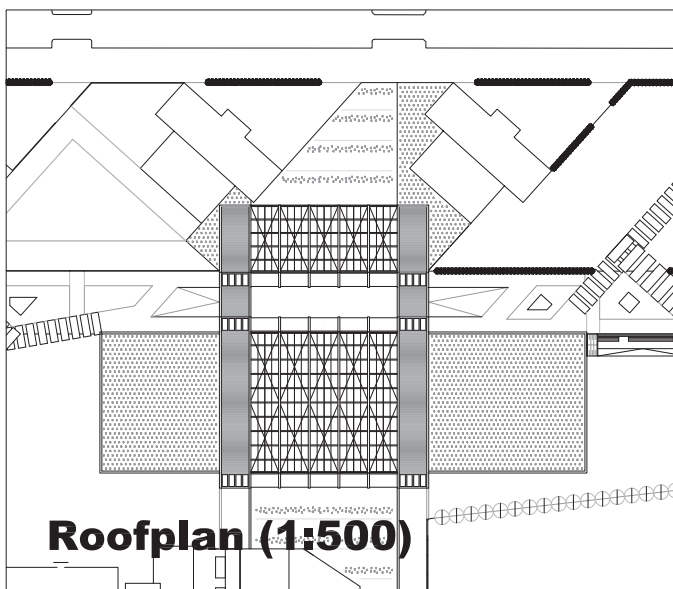
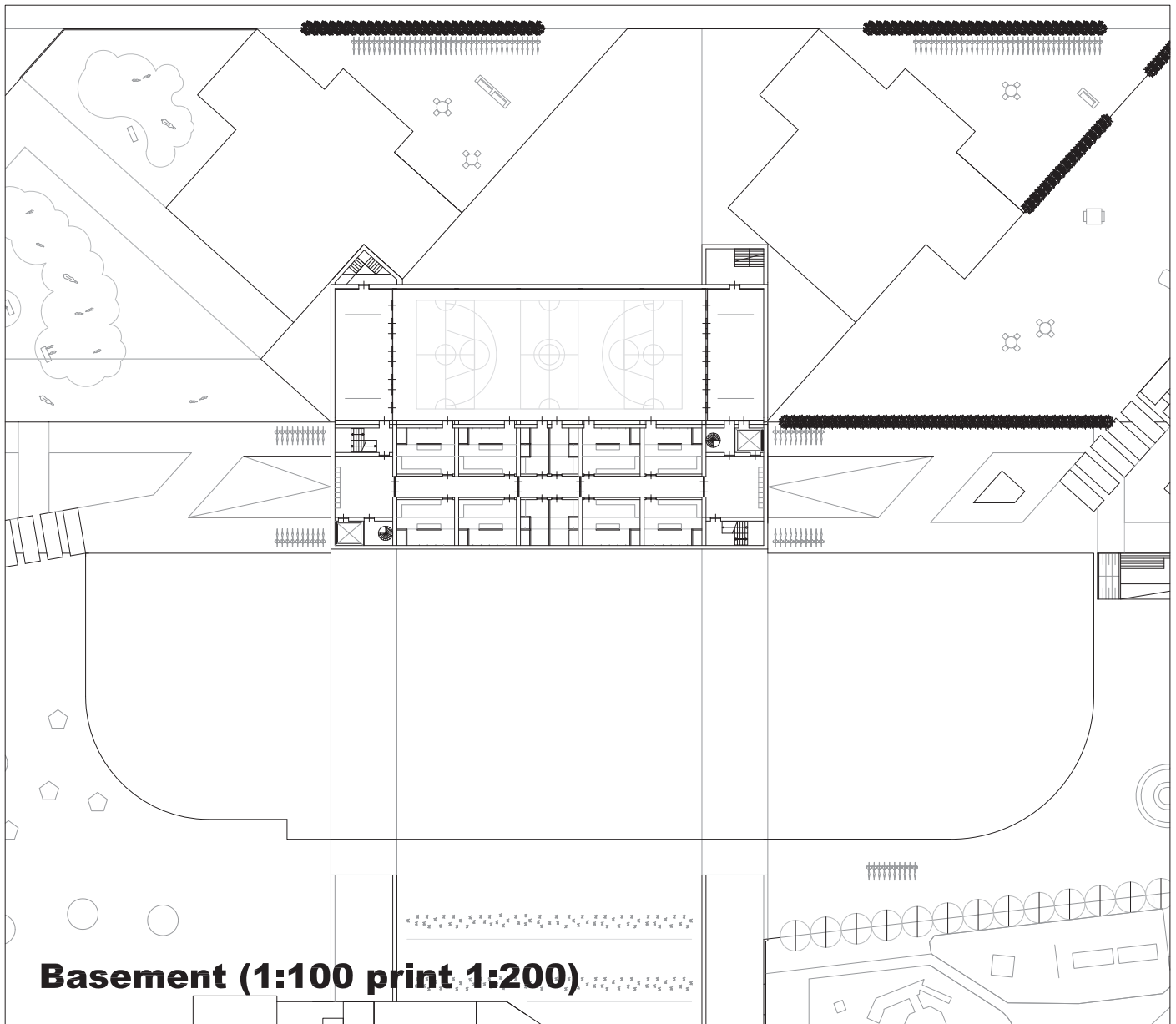
First floor



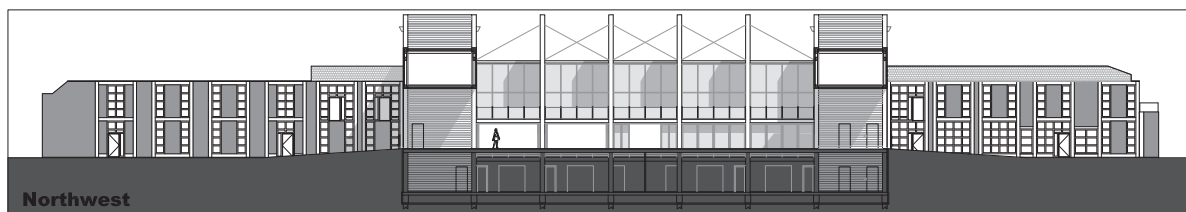
Section BB'

Materializing Identity

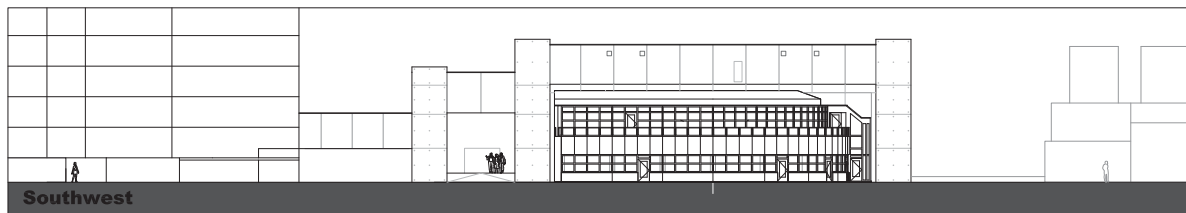
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Facades 1:100



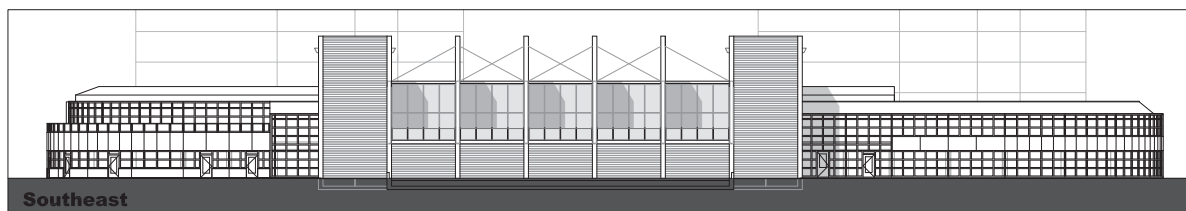
Northwest



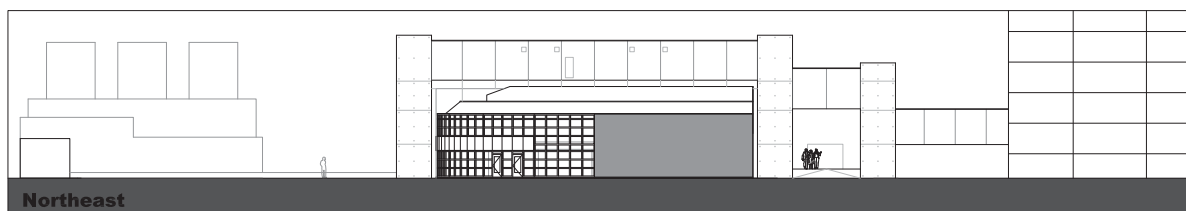
Southwest

Materializing Identity

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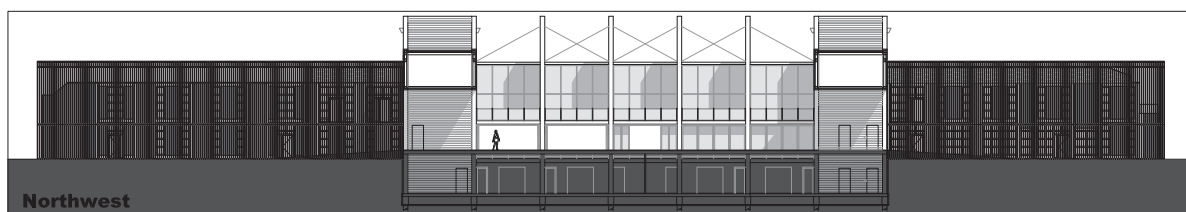


Southeast

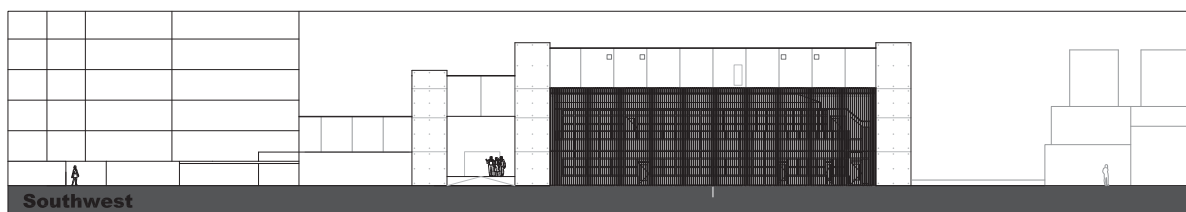


Northeast

Facades 1:100



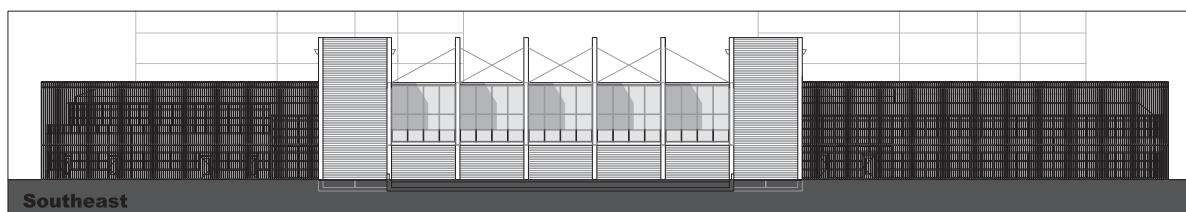
Northwest



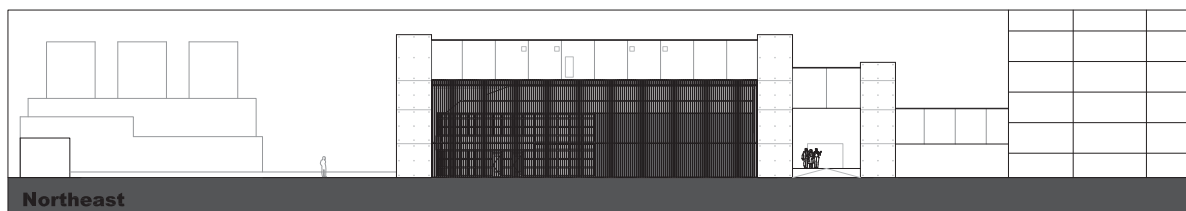
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Materializing Identity

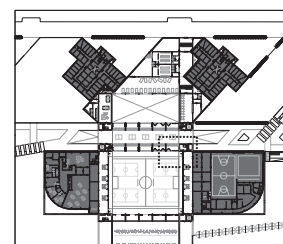
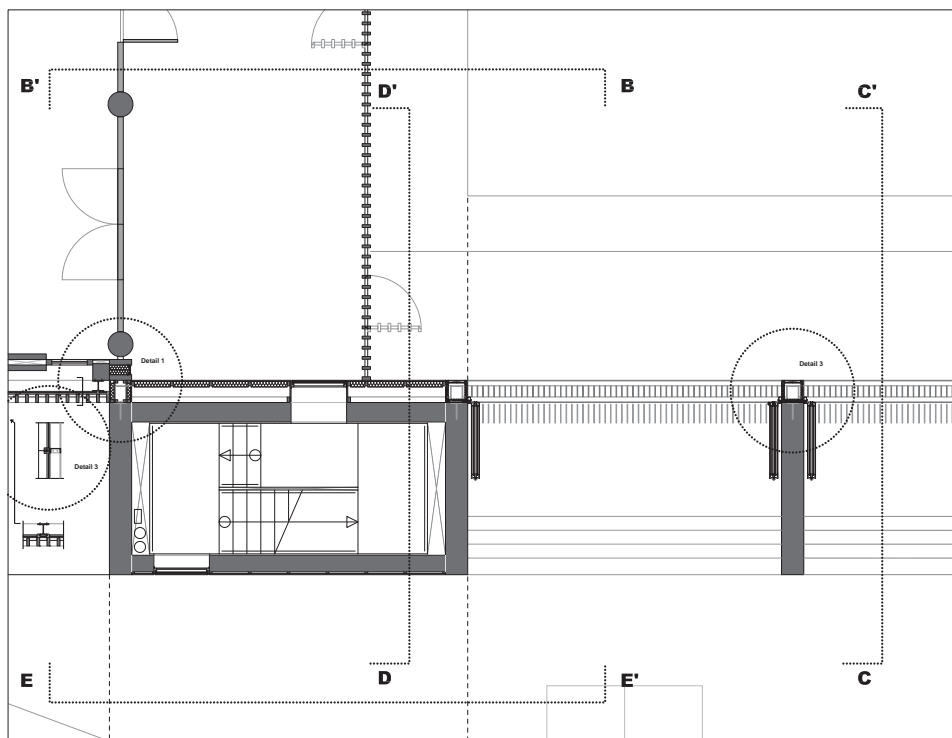
Allan Pinheiro 1276271



Southeast

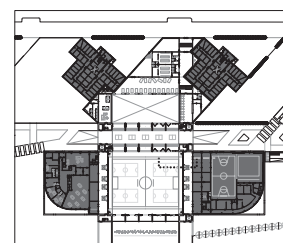
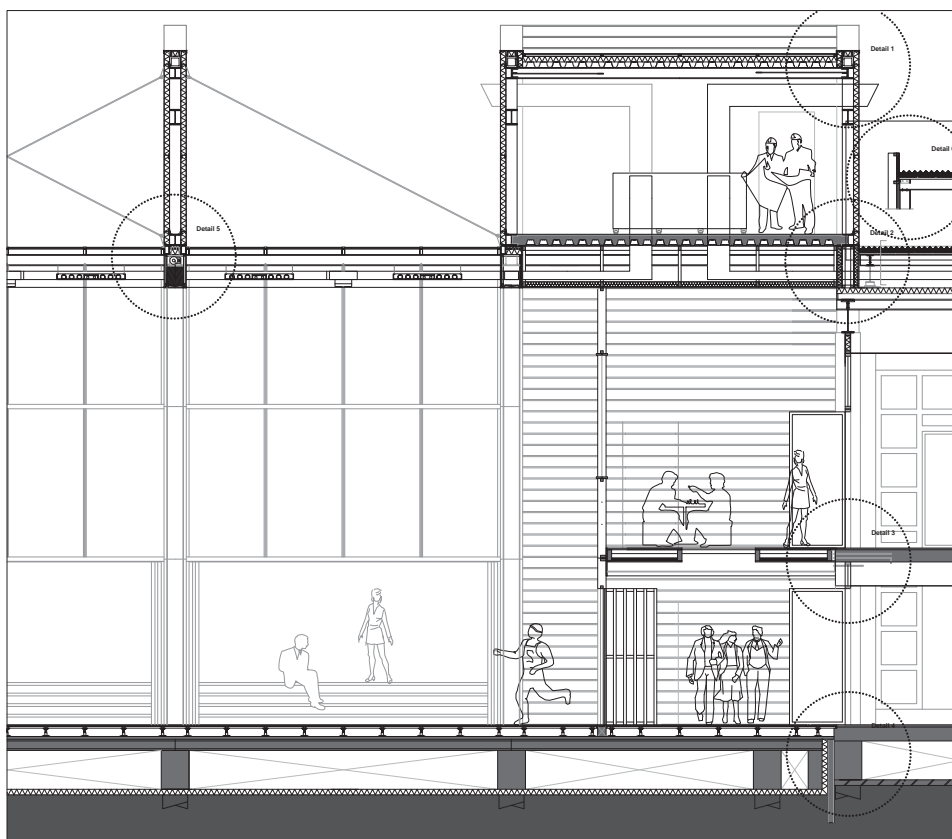


Northeast



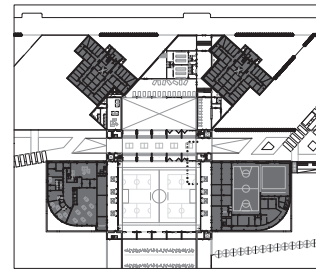
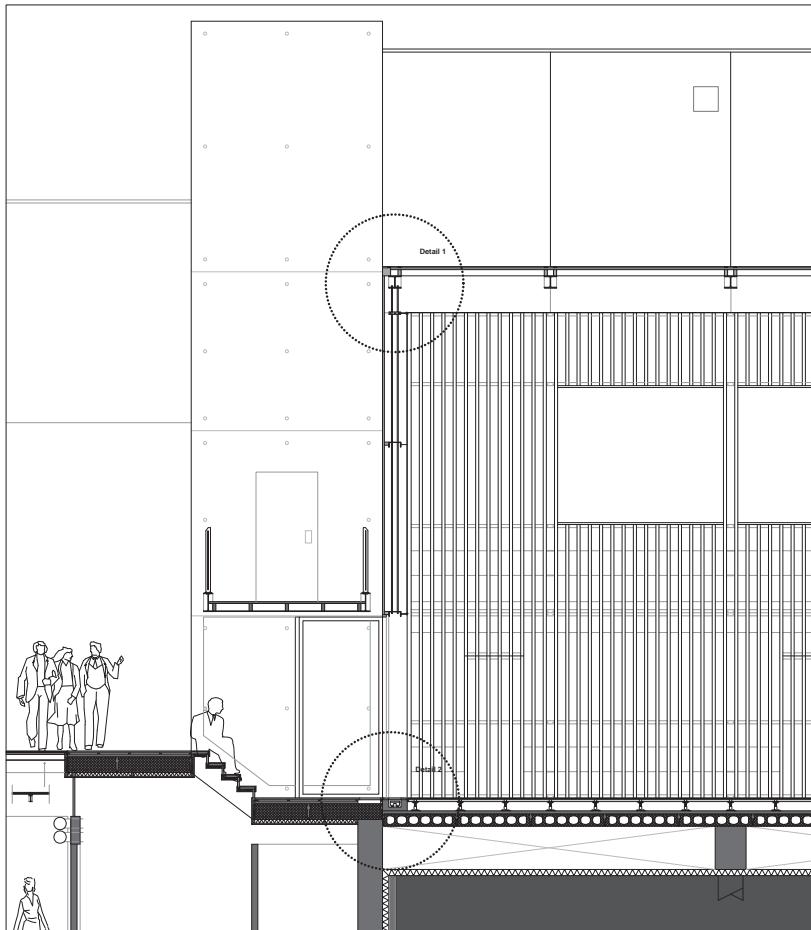
Materializing Identity
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Segment 1:20
Horizontal Section AA'



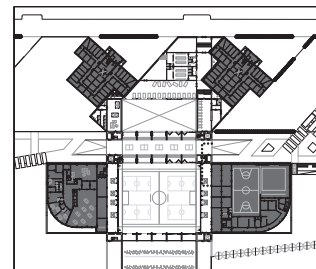
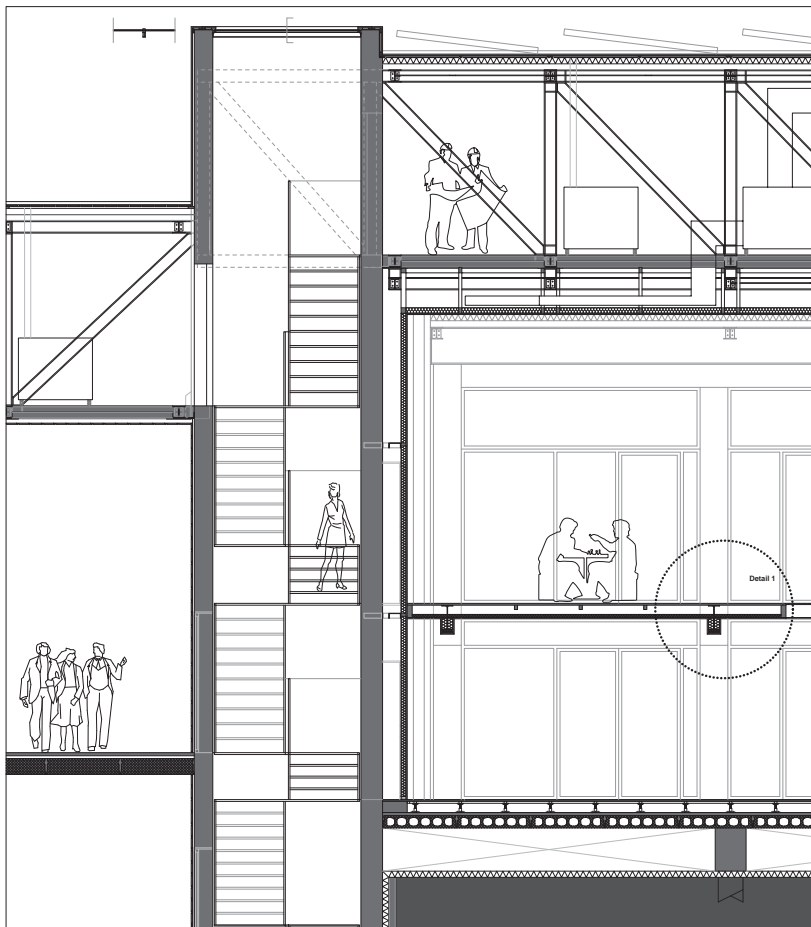
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Segment 1:20
Longitudinal Section BB'



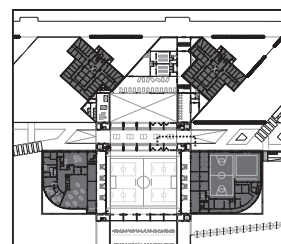
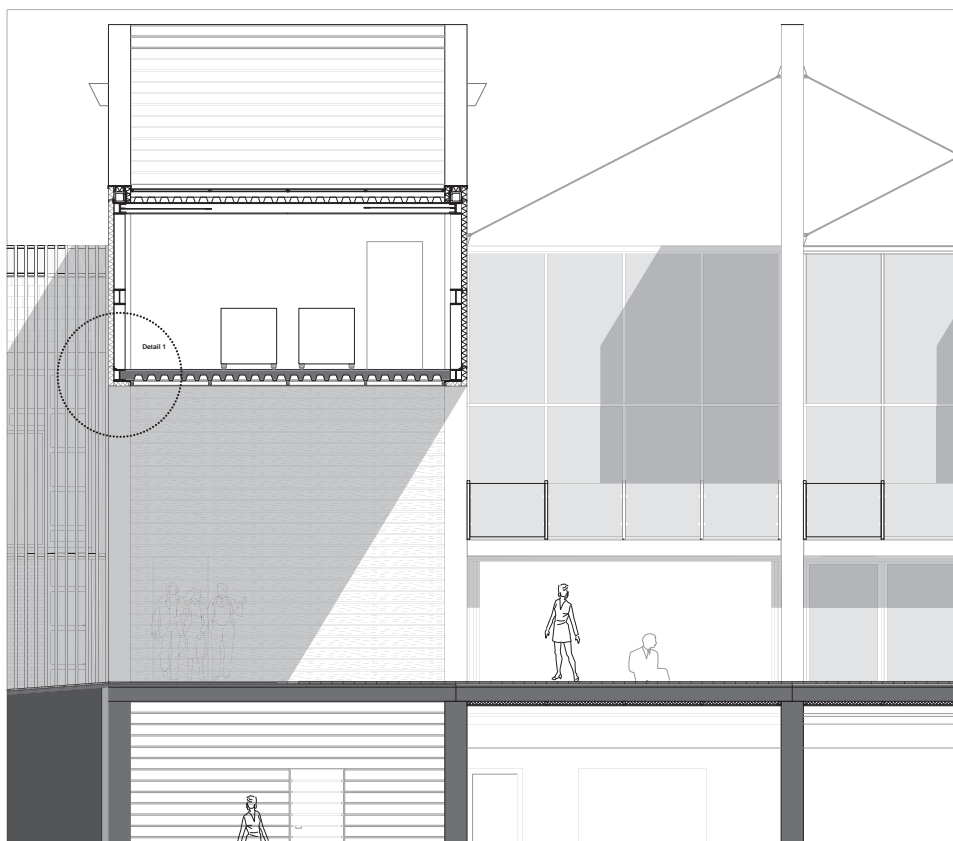
Materializing Identity
Allan Pinheiro 1276271

Segment 1:20
Cross Section CC'



Materializing Identity
Allan Pinheiro 1276271

Segment 1:20
Cross Section DD'



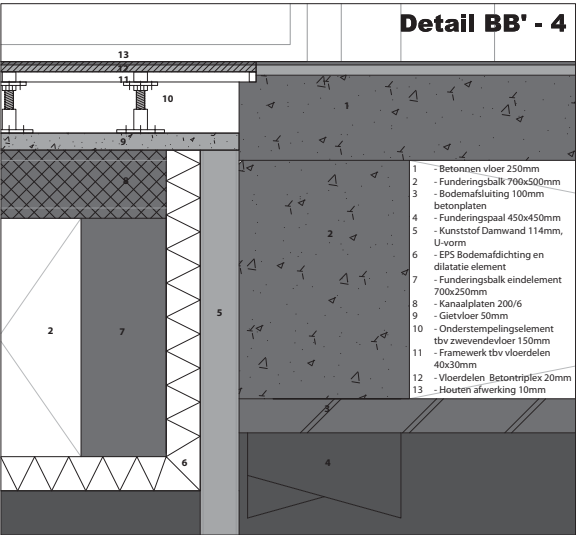
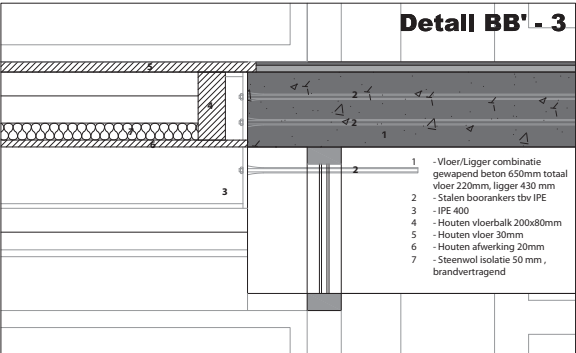
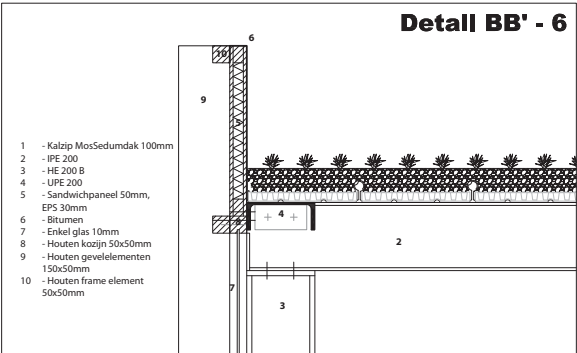
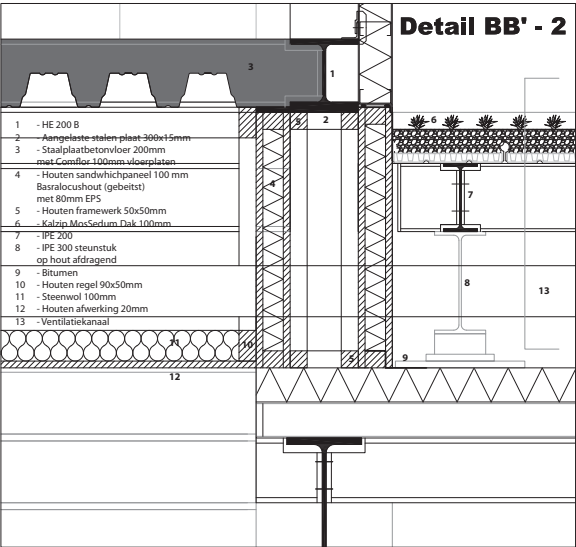
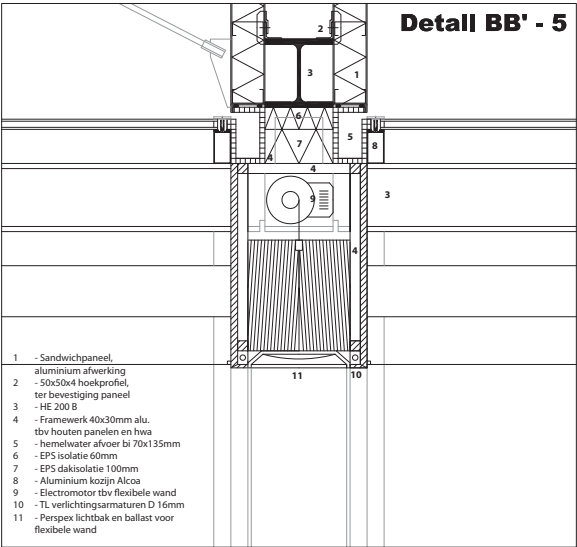
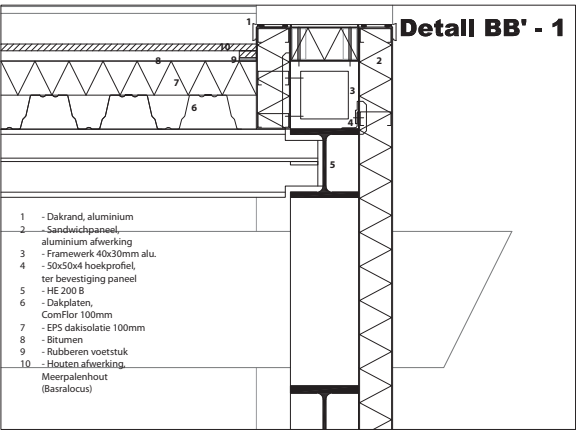
Materializing Identity
Allan Pinheiro 1276271

Segment 1:20
Longitudinal Section EE'

Materializing Identity

Allan Pinheiro 1276271

Details 1:5

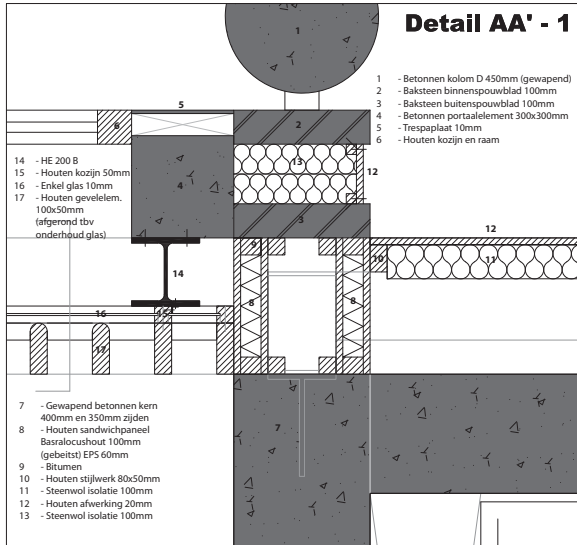


Materializing Identity

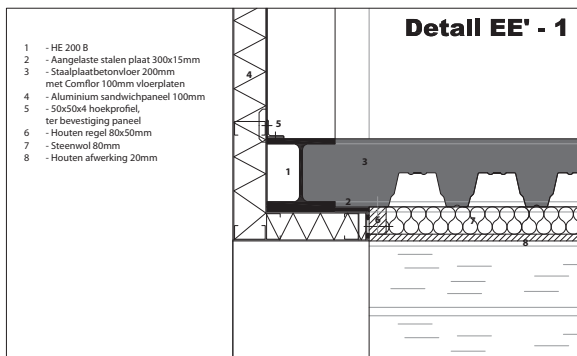
Allan Pinheiro 1276271

Details 1:5

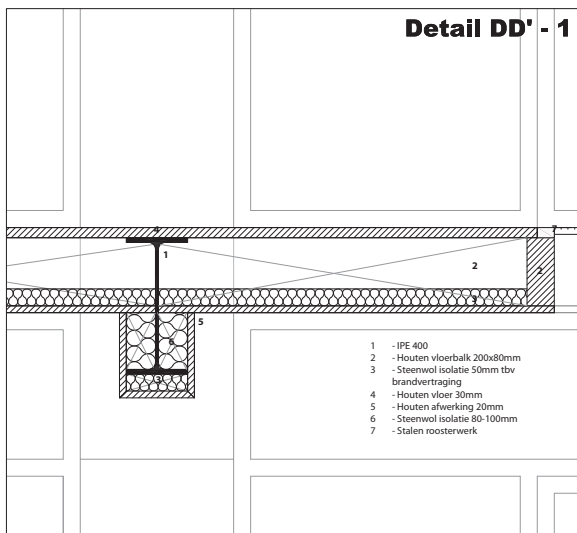
Detail AA' - 1



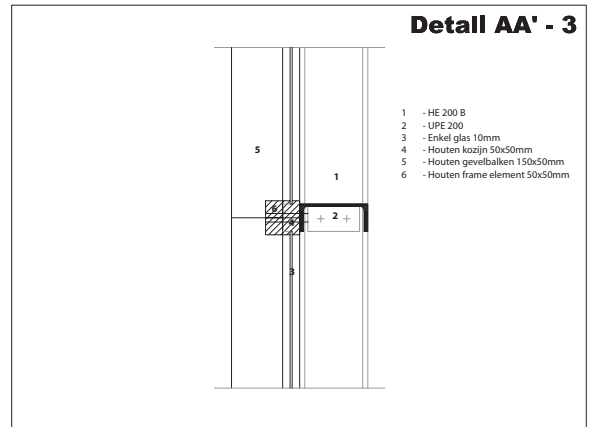
Detail EE' - 1



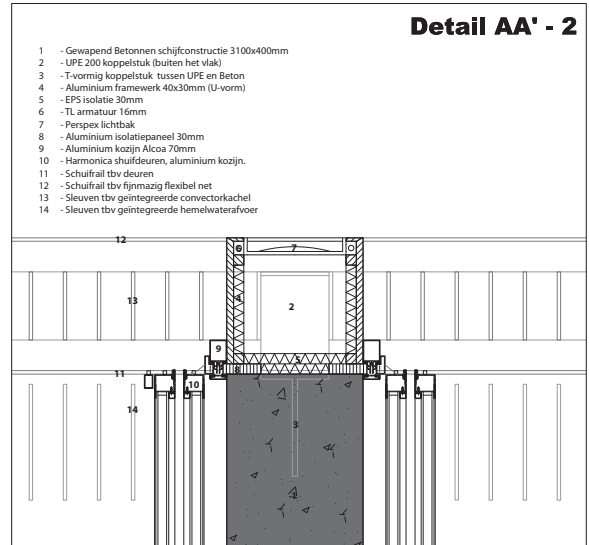
Detail DD' - 1



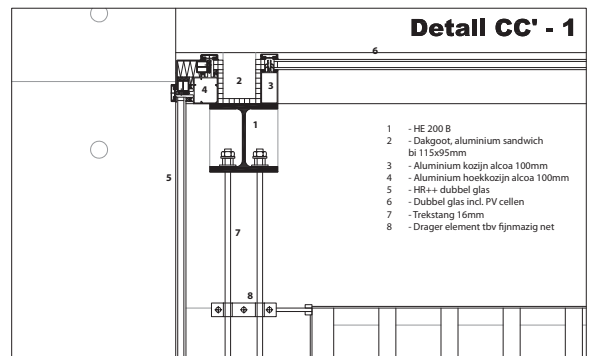
Detail AA' - 3



Detail AA' - 2



Detail CC' - 1



Detail CC' - 2

