Rotterdam public realm
1.0 analysis

graduation studio
public realm
rotterdam

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in search for hybridity
01 group 1

understanding urban morphology
02 group 2

infrastructure and transformation
03 group 3
This booklet illustrates the analysis of the graduation studio Public Realm Rotterdam, within the chair of Public Building, TU Delft, 2012-2013.

During analysing three groups did research on our district Jacobsplaats in Rotterdam with different perspectives in order to get a broader review which can be shared with one another.

The first group will research the site with the perspective of hybridity. They will question the hybridity of Rotterdam and in specific the district of the Jacobsplaats and try to define if its a quality.

The second group will look deeper into the ...

The thirth group will investigate Rotterdam through infrastructure.... and historical...

Rotterdam central station

Sint Jacobsplaats

Binnenrotte

Blaak station

Maas river
Rotterdam public realm

01 in search for hybridity

Throughout this first analysis, hybridity in Rotterdam will be the general topic throughout the investigation.
A fish-eye perspective of the market square. The first impression.
Kevin Lynch and the phenomenological approach

The phenomenological approach seeks to estimate how individuals perceive and navigate the urban landscape through its visual qualities. To help visualize the form of the town, Kevin Lynch uses five basis elements:
- roads / streets;
- edges (meeting line between areas);
- areas / districts;
- nodes;
- landmarks.

The ‘mental’ maps of the town are then interpreted by the planner, who summarizes the town ‘image’. Lynch uses experiences from town studies to consider how the five elements should be organized and presented in order to achieve the desired result.

phenomenological approach towards Rotterdam

Visual environmental image is always one of the first senses that the user perceives in a new space. We used this phenomenological method as starting point for our research in order to understand the visual impression of the city.

We start with looking at Rotterdam’s market square with a fish-eye perspective. A perspective that enhances on a more comic-way how Rotterdam is interpreted as an incoherent and complex city where every building is acting as a landmark and where every user (inhabitant, worker, tourist, visitor) has his own interpretation and use of the city. The urban morphology of Rotterdam does not anymore guide people. There are not a couple of landmarks; almost all the buildings act as landmarks. Rotterdam is scattered, fragmented.

hybrid city

We see Rotterdam as a ‘collage city’, an incoherent entity, every building, every district has its own architectural appearance that most of the time does not relate to the surrounding architectural expressions. We perceive the city as a combination of architectural forms that more or less standalone. We state that this appearance on the scale of the district / city is hybrid.

One of the defining characteristics of a hybrid city is diversity. Diversity, more generally, could allow different ideas, opportunities, and experiences to coexist, thereby creating conditions for constant innovation and creativity. A hybrid city is both an actor in the global economy and a self-reliant entity that meets local need for basic goods and services. Its diverse economy is both industrial and craft based, high tech and low tech, formal and informal.*

A question that raises is if Rotterdam intend, on a conscious way, to hybridize the city during the rebuild after the Second World War? The city appearing as a hybrid entity encouraged us to analyse the topic of hybridity on city level and building level deeper. We try to define quality by creating a theoretical framework that offers us the possibility to categories the different influences on quality. If we decide eventually that this hybridity is a quality of the city, then we can choose (or have to choose) to empower this in our proposed masterplan. Otherwise, we should try to downgrade this hybridity.
a phenomenological approach combined with objective analysis

• city form (6 topics)
• programmatic distribution

what?

static

movements

movements in the city

flows

people

demographics

questionnaire

conclusion

conclusion on district level

intermediate conclusion and comparison 1

intermediate conclusion and comparison 2

intermediate conclusion and comparison 3

specific analysis

conclusion on site level

strategy for masterplan
What is hybrid (-quality) and how to analyse?

Hybrid becomes of interest when cities increase there densities. The quality of hybrid is not just a combination of different functions; the quality lies within the power of these combinations. If one function enhances the other, if they act together, that’s when hybrid expresses its quality. You could say, it is a combination with benefits, otherwise it is only multifunctional.

analysing the perception of hybridity in the city

To analyse hybridity in the city we first have to define what a hybrid city is. We do this by looking at three scales, from small to large:

1. hybrid buildings

There can be found lots of theory about hybrid buildings, for example Steven Holl who defines hybrid buildings in ’Hybrid Buildings, Pamphlet Architecture 11, 1984’ as a pure building type where a concentration of many social activities are within an architectural form. The modern city has acted as fertilizer for the growth of architecture from the homogeneous to the heterogeneous in regard to use. Urban densities and evolving building techniques have affected the mixing of functions, piling one atop another.

2. hybrid nodes

Clustering places where different functions meet and interact can be annotated as hybrid nodes. We are talking not only about different programs, but also spatial hybridity, different building heights or scales, buildings from different ages showing the layering of the city throughout history, the combination of different traffic lines (slow traffic, fast traffic and public transport), etc.

3. hybrid districts

Hybrid districts are composed by a collection of hybrid nodes which reflect different characteristics.

(4.) hybrid city

We define a hybrid city as a city where one or more scales of hybridity are present. As ultima, there could be an interaction between these different hybrid scales. In the case of Rotterdam there will probably be a focus on the larger scales like nodes and districts, instead of the scale of the building.

quality

Quality _ the sentence mentioning the specific quality will be highlighted in this color

Rotterdam public realm

analysis

strategy for analysing

analysing

The inspiration for analysing came from Kevin Lynch’s methodology and the five basis elements he describes. Nevertheless, the analysis we are producing is different than the way he was investigating the city. The aim is to combine phenomenological approach with more objective analysis and understand how they pertain with the visual appearance of the city.

In a matter of scope and scale there are three ways of analysing Rotterdam’s hybridity:

1. Focussing on the project area / district-level, zooming in and out, using different scales;
2. Comparing the project area with other case-studies in the city, using only one scale;
3. Starting with the focus on the project area and if necessary comparing with other case-studies.

The third option appears as the most flexible. Starting with analysing the Jacobsplaats within the Laurens-quarter, and if needed comparing it with the hybridity of central station area or the Witte de With surroundings. At the end it was shown not necessary to make use of these case-studies.

strategy in analysing

Making a strategy framework to guide the analysis we created three categories:

The first part of the analysis has to do with the city as a static entity. Analysing six topics within the city form, like borders / boundaries, ensembles, building heights, etc.

The second part investigates the movements in the city: activities on the site and in the district, different types of traffic and urban flows.

The third part takes a look into the demographics of Rotterdam and how these different users and inhabitants use the city.

The results of these individual studies will be compared with each other and combined to come to the general conclusion.

concluding

After completing the objective analysis, the gained knowledge can question the validity of the first phenomenological perception of hybridity. This conclusion will lead to the strategy for the masterplan proposal.
Rotterdam public realm
the static city

The first part of the analysis is addressing the static city, its streets, the buildings, the public space, etc.

The urban tissue evolved during history, from the founding of the city in 1340, the demolition during the second war bombing and the reconstruction by the Plan van Traa.

These two historical maps show an important point, which we call node. It is the point were the Rotte enters the city triangle of Rotterdam.
nodes, landmarks, building heights

visual perception of space

The improved version of figure-ground diagram displays visual boundaries and emphasizes the main character of space. It ignores small buildings of low importance as these buildings do not play a big role in the perception of space on a larger scale. It also includes the panoramic view from the exact spot and allows to analyse specific points on site.

The most recognisable longest space of approx. 1.5 km is giving a strong image of the location. Although it is perceived as one open space, it has different qualities and programmes on each part. The part on the north side of the standing point is functionally isolated by the stressing road.

The diagram clearly shows that the site is at the border of the actual city center. As the high-rise buildings appears from south-east to north-west sides, the north-east part from the analysis point is recognised as mostly low-rise residential area.

landmarks

Landmarks are important points of reference in the city and highly contribute to the image of the city. In which areas they are concentrated and what is the relation to it from the given site?

The site is on the boundary where the are of high-rise buildings ends and suddenly becoming a low-rise area. Design decisions could lead to helping gradually go from one high-rise area to another, or attracting people coming from the north deeper in the area in order to “join” the “cloud” of skyscrapers. At the same time this would make the area more hybrid. It could empower the intention that the design takes in the question of the ambiguity of the site - separation or continuity.

building heights

What’s interesting is that there is shift in heights at the historical node on the north side of Jacobsplaats. Walking from Blaak towards the site the buildings pattern gradually gets lower, almost on a linear way: starting at 75 meters, down to less then 14 meters. Then it immediately turns into a central station district of high-rise buildings (up to 150 meters).

Rotterdam public realm

city form

the static city

borders

Three gradations are made in assigning borders on and around the site. The strongest border reflects the railway tracks which only sometimes can be crossed. The second strongest borders are created by linear, important paths, most of the time related to history (Binnenrotte, Hoogstraat, Coolingsel, Goudsesingel). The least intense border is embodied by water channels. Only at bridges the water can be crossed.

districts

A district is a category for perceiving a part of the city as one entity. It is intentionally different then the administrated districts of the municipality of Rotterdam. It is also different then ensembles, those are combinations of buildings.

ensembles

Trying to define and separate ensembles, different combinations and scales appear that are not perceived instantly. As stated before, ensembles are combinations of buildings, not concerning borders, barriers or districts.

The term ensemble is used to indicate a group or composition of buildings, which share the same architectural appearance and thereby acting together in the urban context. On and around the Jacobsplaats a couple of ensembles are assigned.

Multiple ensembles acting together in the city contributes on making a hybrid entity. The size of the ensemble determines on what scale it acts as a fragment in the hybrid whole. People have their own experience of fragments in a city, even within one person there’s from day to day another interpretation. By defining your destination, the distance determines the scale of the fragment. If you stay more on one spot, your operating range determines the scale of your fragments.
not visible landmark
visible landmark
high importance
not visible landmark
low importance
visible landmark
low importance
cloud that connects important landmarks
visual perception of space

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railway border
path border
water border

district eastside of Binnenrotte
the Jacobsplaats as district
district of gravin-adela community
central station district
historical western part
borders, nodes, districts, ensembles

Rotterdam public realm

city form

the static city

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**Rotterdam public realm**

**city form _ conclusion**

*the static city*

On the other hand the site wants to create a boundary to close the big empty market space. The problem of the Binnenrotte nowadays is that when there is no use such as the market (only twice a week), it is just a too big and wide-open space with no use or function. It acts more as a boundary you have to cross, then a place to stay.

Node D reflects this ambiguity as being the transition space where strong edges intersects, the market area ends and the level of activity changes. Visually it can also be perceived as a separation of two types of spaces.

There is an opportunity in designing a possible symbiosis regarding the proposed masterplan.

**appreciation _ we appreciate the sites ambiguity and see it as an unique identity**

**friction between borders vs ensembles / districts**

Borders and ensembles / districts act together in the urban realm. But which one distinguishes itself by being more influential for the perception of the user than the other? Simplified: do borders act ‘above’ ensembles and districts, or vice versa? There is not one true answer.

On the one hand ensembles and districts can be so strongly architectural or functionally coherent that they can easily dominate borders, on the other hand there are situations where borders can be prevailing.

For example, the separating influence of the Binnenrotte which is intensively related with history. The size of the former water the Rotte, which today is still visible in the wide cross-section of the market area, creates a border in the contemporary perception of the urban morphology.

An example where ensembles dominate borders can be found at the Jacobsplaats itself. The ensemble of the buildings from the eighties stands above the border of the elevated train tunnel and also above the other patio-ensembles. This, due to the strong coherence in the unique architectural expression of this ensemble.

**borders and nodes**

There is a direct relation between the borders running through the district and the cloud that combines the important landmarks. They overlap with one another. This indicates the importance they have in the city.

Could one say that around these borders there is a high level of activity? If we investigate them in reality, yes.

Nodes appear at intersections of borders. They suggest a point in the district were activity is clustered. The more borders in a node, or the higher the importance of the borders, will create a classification of the influence of the node on its surrounding.

**Quality _ in a hybrid district, important nodes where borders cross, behold high activity within the urban realm**

Node C, the node on the north side of the Jacobsplaats, is of big importance. This node reflects the point in history where the Rotte entered the city triangle. Nowadays an orange structure of the city gate tries to give spirit to history, but is this sufficient? Does the big infrastructural orientation barricades this former entrance to the city? This important historical node should be a point of attention for the future. Design should investigate the possibility to gain back the connection which is now lost.

**Possibility _ the historical node on the northside of the Jacobsplaats is now underappreciated and deserves design attention for revitalisation**

**ambiguity**

The largest linear “void” of approximately 1,5km (along the Binnenrotte), is too long and empty for this type of public space in the city centre. It becomes more similar to the morphology of an avenue or a boulevard.

On the one hand the area wants to connect with the linear void towards the market area on the Binnenrotte and act as a link in the north-south connection. There is a slow traffic line proposed by the local municipality along this area. Continuation is insinuated by morphology, history and the slow traffic proposal.
programmatic identification

The area of the Laurensquarter consists mainly of dwellings combined with a public ground floor that opens towards the public space of the Binnenrotte strip.

public buildings

There are a couple of public buildings along the Binnenrotte strip:

1. The Sint-Laurenskerk (church), build between 1449-1525, renovated in 1952-1968;
2. The library of Bakema and assistant Hans Boot, build in 1981;
3. At the end of the strip, the public transportation hub Blaak is situated, which opened in 1877 for the train and in 1982 for the metro;
4. The market hall of MVRDV. This building creates a public covered market hall by building dwellings over it;
5. The new city hall by Rem Koolhaas’ OMA.

Rotterdam public realm
programmatic distribution
the static city

hybrid on building level

How is hybridity integrated in the existing building stock in the district, if we look at hybridity as described in the introduction, a combination with benefits.

The only present combination combines dwelling with a commercial ground floor or parking. This does not fit in with the thought that hybrid functions enhances each others quality.

The quality of the hybridity in the building blocks seen separately is concluded as low.

Does the area need an increase of hybridity to enhance quality? Or is the area hybrid enough with the public buildings included?

Is it true that because more public buildings are on the southside of the strip, that you are attracted more towards Blaak, the south, then towards the Jacobsplaats, the north?
Rotterdam public realm

programmatic distribution _

conclusion  the static city

By determining clouds where a typical program is dominant, conclusions can be drawn on the sprawl and diversity of the programmatic distribution.

There are a couple of important nodes defined where programmatic clouds overlap. These nodes are places where a high activity level arises. It can be noticed that these nodes are concentrated in the contemporary city centre district. The differences between these nodes reflects the position they take in the urban field. On the north-east side of the city centre the dominant program is dwelling. Within the city centre the commercial, cultural and office program is dominant.

crossing the border

The Jacobsplaats is located in the intermediate zone between the hybrid inner city (which shifted during history towards the west and thereby moving also the original east border of the city triangle), and the more monofunctional periphery containing mostly dwellings. We call this zone the interstitial space, meaning a space between spaces full of structure or matter. Within the masterplan proposal the site can solve the issue of connectivity between these two areas.
Rotterdam public realm
movements

The second part of the analysis is addressing the framework of the infrastructure of the city.

Traffic lines for public transport, for cars, bicycles and for pedestrians are investigated.

Next to these traffic lines the flows how people use this framework are investigated through a questionnaire. Also the amount of the activity on this framework of infrastructure is analysed.
Public transport: train, metro and bus

Public transport radius of actions
connection with public transport

The site is situated in the overlapping area of the reach of trainstations Blaak and Central Station. Next to the trains, metro and tram also are nearby.

public transport nodes

There are four dense points recognisable in the graph showing the radius of action of the entrances for public transport. These relate to the cloud of landmark / highrises, but also with offices and building heights.

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pedestrians

Pedestrians do not have much obstructions on their paths, only the big infrastructural vain for cars that connects the east and west of the city.
parking for cars
There are three levels of activity for the infrastructure for cars. From intense, to medium and low activity.

Parking

Parking is very dominant in the public realm of the district. The public parking place under and next to the patio-building is operating on city-district level. It offers parking spots for the market, but also for the municipality which is positioned just around the corner.
Rotterdam public realm
movements in the city _
conclusion  movements

hierarchy of traffic lines

first order
Adjacent to the Jacobsplaats two important transport axes are positioned (Goudsesingel and the Coolsingel). These axes connect different parts of the city mainly for public transport (metro and bus) and fast traffic (cars).

second order
On the southside the street Meent acts as a second order traffic line.

third order
Within the district there are traffic lines that act only as destination routes.

Comparing these traffic lines with ensembles from the city form studies, the second order line breaks through an ensemble. Next to ensembles, if you compare it with the graph of visual perception of space, it also breaks up the long void from the north towards station Blaak into three parts.

new formed district
These mentioned traffic lines create a new understanding of district, shown in the graphic of the entrances to the area.
activity on a market day

activity on a non market day
activity scheme

The two activity schemes show that the site does not benefit from the activity of the market. But the main question is, should the site benefit / extend and attract these visitors or should it have its own identity with a specific visitor. Play its own role within the transition zone between the hybrid inner city and the monofunctional periphery.

Rotterdam public realm
flows
movements

crossing the node

Within the north-south connecting you have to run through the historical node and the cross the big infrastructural east-west connection. This crossing is not without friction. As pedestrian you have to go wide around the node, overcome different heights, wait for pedestrians lights, etc. It's a barrier.
own route and route to guide

The left map shows how people explain their own route from the market area to central train station. The right map shows how people guide a tourist from the market to central train station. The difference between the maps show three conclusions:

The first is the different use of landmarks. When people explain how their own route would be, they use small local landmarks like little bridges, BurgerKing, police station. When people explain the route for a tourist, they use bigger landmarks like the big roundabout Hofplein, or the highrise building of the NN near the station.

The second conclusion lays within the amount of different routes they use. Only big important routes are used when explaining for a tourist.

The last conclusion has to do with the reason why people walk on the streets. Most of the time they explain this with linking it to the presence of activity / attractiveness and entertainment. People reply that the Jacobsplaats is not attractive to use, there is nothing which links to the presence of activity.

Rotterdam public realm
flows
movements
Rotterdam public realm

flows _ conclusion

movements

no benefit and obstruction

Within the investigation of flows, the fact is raised that the site does not benefit from the activity of the market.

Next to that when people cross the historical node in the north south axe, they come across an infrastructural obstruction.

attraction on the route

Comparing the programmatic distribution with the most used route when asking the direction one would take to the central station, we see that people want to be entertained and walk along commercial streets.
The last part of the analysis is addressing the people that use the city. This will complement the static data of the city and the movements in order to create the body of knowledge of the city and the site.

Rotterdam is a city were half of the people is not born with a dutch passport. By understanding the people who use the city we create an environment were we can propose a design in the city for them.
Total population: 617,347

52% of the inhabitants of Rotterdam is born with a Dutch passport.
diverse city

As Rotterdam offers a lot of diversity in countries of origin of its inhabitants, the logical result is that the urban environment exists out of many different cultures with its specific habits.

immigrants

The total population of Rotterdam nowadays is 617,347 (January 2012). Of all its inhabitants only 52% are born with a Dutch passport. People living in Rotterdam have over 172 different nationalities. Migration started in the 1960’s and early 1970’s due to a shortage of unskilled workers, which made it necessary to attract ‘guest workers’ from Mediterranean countries, like Spain, Italy, Turkey and Morocco, as well as Yugoslavian immigrants. In the 1970’s the inflow from abroad increased as, in particular, Turks and Moroccans immigrated for the purpose of family reunification.

The independence of Suriname in 1975 eventually caused an increase of migrants as over 40,000 Surinamese came to the Netherlands as they could obtain the Dutch nationality automatically.

Between 1980 and 1990 the increase of immigrants continued. The main purpose of this increase was family reunification.

International immigration is characterized by the arrival of asylum seekers. Although the government introduced measures to decrease the number of immigrants, migration of asylum seekers could not counterbalance the decrease of the total number of immigrants.

Rotterdam public realm
demographics
people
terminology

To understand the differences between terms that define necessary terminologies, those terms need more explanation, as they are usually interpreted in many ways, in order to create a clear framework according to which the diversity of Rotterdam’s inhabitants can be reflected upon.

*immigrant*  
a person of whom at least one parent was born abroad.

*native*  
a person whose parents were both born in the Netherlands.

For immigrants there is a distinction between people that were born abroad (first generation) and people that were born in the Netherlands (second generation). Also, there is a distinction made between Western- and non-Western immigrants.

*first generation immigrant*  
someone born abroad, with at least one parent that was born abroad.

*second generation immigrant*  
someone born in the Netherlands with at least one parent born abroad.

*Western immigrant*  
immigrant originating from a country in Europe (excl. Turkey), North America and Oceania, or Indonesia or Japan.

*non-Western immigrant*  
immigrant originating from a country in Africa, South America or Asia (excl. Indonesia and Japan) or Turkey.
1st generation; All everyday life practices within the same territory

2nd generation; Everyday life practices expand more and more outside of the territory


- Total number of immigrants
- Total number of non-Western immigrants
- Total number of Western immigrants

- 1970: 250
- 1980: 500
- 1990: 750
- 2000: 1000
- 2010: 1250
- 2020: 1500
- 2030: 1750
- 2040: 2000
- 2050: 2250
- 2060: 2500

- x 1000 immigrants

1st generation
2nd generation
3rd generation
4th generation

Total number of immigrants
INCREASE OF IMMIGRANTS
On the 1st of January 2011 the Netherlands was inhabited by approximately 3.4 million immigrants of both the first, as well as the second generation. According to the Central Bureau of Statistics (CBS) this number will grow to about 4.7 million in 2060. From these facts we can conclude that the inflow of new immigrants will remain an important factor in the future of the Netherlands. Non-Western immigrants are the majority with 55% of all immigrants. According to the CBS the percentage of non-Western immigrants will keep rising, even after 2060.
The largest groups of immigrants are strongly concentrated in the countries’ four biggest cities; Amsterdam, Rotterdam, The Hague and Utrecht.
The question is how should these cities deal with this experience of immigration pressure.

EXPANSION OF THE TERRITORY
Immigrants become more and more involved in the Western society. For example, they become more involved in education, which eventually results in a higher general level of education, which then leads to higher functions in labor.
First generation immigrants may lack a full understanding of the Dutch language, but as their kids start going to primary/elementary school they learn the language from the start. Also, they interact with kids from different cultures, so they start building an intercultural network, and get familiar with other cultures.
A female of a non-Western family is a good example to explain the eventual expansion of the territory of the immigrant. The role of the first generation female in a non-Western family is mainly to take care of the kids and the household. All her everyday life practices are taking place within a relatively small domain (the house, the local supermarket, places for worship). Taking care of the household is of less importance for the second generation female in a non-Western family. As she is taking part in education and later labor, the second generation female expands her territory, as she might be visiting high school or university outside of the area she is familiar with. Again, due to the interaction with different people of different cultures she gets familiar with a bigger territory within the city, which diminishes the (original) boundaries of the territory of the first generation.
Rotterdam public realm

demographics

people
<table>
<thead>
<tr>
<th>Category</th>
<th>1999</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st generation Moroccans</td>
<td>64%</td>
<td>23%</td>
</tr>
<tr>
<td>1st generation Moroccans</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>2nd generation Turks</td>
<td>50%</td>
<td>18%</td>
</tr>
<tr>
<td>2nd generation Turks</td>
<td>14%</td>
<td>33%</td>
</tr>
<tr>
<td>2nd generation Moroccans</td>
<td>32%</td>
<td>50%</td>
</tr>
<tr>
<td>2nd generation Moroccans</td>
<td>37%</td>
<td>32%</td>
</tr>
<tr>
<td>2nd generation Turks</td>
<td>37%</td>
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<td>2nd generation Turks</td>
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<td>2nd generation Turks</td>
<td>59%</td>
<td>39%</td>
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<tr>
<td>2nd generation Moroccans</td>
<td>52%</td>
<td>8%</td>
</tr>
<tr>
<td>2nd generation Moroccans</td>
<td>63%</td>
<td>9%</td>
</tr>
<tr>
<td>Natives</td>
<td>10%</td>
<td>35%</td>
</tr>
<tr>
<td>Natives</td>
<td>7%</td>
<td>37%</td>
</tr>
</tbody>
</table>
As discussed previously, a shift has occurred as changes in society led to the adjustment of our values, which eventually led to a change in the requirements that are set for immigrants.

There seems to be a paradox in integration as the results of the survey show. Although second generation immigrants with Turkish and Moroccan origin in general have a higher proficiency in Dutch speaking and have a higher level of education.

The Rotterdam Youth Survey (RYS) is a survey that took place in 2006. For this survey a representational group of 650 Turkish, Moroccan and native-Dutch youngsters in Rotterdam participated. It has proved that since 1999 the integration of young people from Turkey and Morocco in Rotterdam has improved according to the conventional criteria, but that the people themselves do not experience it as such, neither immigrants, nor natives. In 2006 youngsters with Turkish or Moroccan origin rate their own proficiency of the Dutch language lower than they did in 1999.

**the private and the public sphere**

In order to get a better understanding of group identities and contacts within immigrant societies the acculturation scheme of Canadian socio psychologist Berry might be a helpful tool. The scheme deals with the ‘the desire of a group or an individual to maintain or give up their own identity’ and ‘the willingness of the environment of that particular group or individual to accept the new entrants.’

The scheme provides four outcomes:

- Assimilation
- Integration
- Separation
- Marginalisation

Their behaviour in both the private as well as the public domain has also resulted from the RYS. The results show that natives started to require more assimilation in the public sphere. Immigrants want this in a lesser extent, but compared to 1999, not much changed.

Nevertheless, both native, as well as young immigrants in Rotterdam think there should be more room for their own identity in the private sphere. However, it is striking to see that almost half of the native youth requires integration (maintenance of the own culture and adaption to the Dutch culture) from immigrants, while immigrants say they would rather have separation (see scheme of Berry). Especially with youngsters from Moroccan origin, there is a clear increase.

If you split the data from the private and the public sphere into the first and second generation, we see for all groups the second generation prefers more integration and less separation, compared to the first generation. However, all groups of Turks and Moroccans choose separation in the private sphere, but integration in the public sphere.
Rotterdam public realm

demographics _ conclusion

people

crossing the border

What became clear by analysing the demographics in Rotterdam, is concluded in the diagram on the left.
Rotterdam public realm

overall conclusion

total analysis

fragmentation and hybridity in Rotterdam

If we look back at the first phenomenological perception, we stated that Rotterdam was hybrid on the level of the district / city. Can we conclude after analysing that this is true? And is it a quality for the city?

To give an answer to this question we have to explain on the three different scales, because we said that a hybrid city is a city where on one or more of these individual scales hybrid is present. Even further, that interaction is appearing between the hybridity on these different scales.

1. We can say that on the scale of the building, hybridity is not dominantly recognisable in Rotterdam (yet). Only a couple of hybrid buildings are build in the skyline of the city, such as the red apple building by rapp& rapp.

2. If we zoom out to the scale of nodes, hybridity is strongly present. There are nodes created by crossing borders. Because at borders there is activity, these nodes become spots of concentrated hybridity. Nodes also appear where clouds of dominant programs overlap. On these points, different programs come together and act together in order to become hybrid.

3. On the level of the district, hybridity is also recognisable in the investigated area of Rotterdam. This district is right on top of the intermediate space between the city centre, which is filled with multiple programs, and the monofunctional periphery, containing mostly dwellings.

Rotterdam, especially the city centre, can be seen as hybrid, with a focus on the scale of nodes and districts.

fragmentation a quality????
Rotterdam public realm
overall conclusion

static

city form

1. Ambiguity of continuity and separation of the site, which is reflected in two important nodes. One being the historical node where all the important borders but also traffic lines intersect, and the other node is on the southside of the site and beholds the end of the market and the beginning of the Jacobsplaats.

2. There is an overlap recognisable between the landmark-cloud, the borders and the important nodes. This means that these areas are of high activity.

programatic distribution

3. Hybrid nodes appear in overlapping points of program-clouds. The concentration of these nodes lay within the contemporary city centre. An interstitial area can be assigned to the zone where the active hybrid city center connects to the monofuntional periphery containing almost only dwellings.

movements

4. People tend to walk through active diverse areas.

5. Crossing the historical node, in order to connect the monofunctional periphery with the city centre and vica versa, is on the level of slow traffic almost impossible.

6. The market itself doesn’t feed the Jacobsplaats with continuing activity. This reflects to the question of ambiguity.

people

7. Immigrant growth will continue and the urban sprawl will be more equally divided. These immigrants show a trend that they are crossing more and more borders and districts because their operating radius grows.
SITE ANALYSIS
Rotterdam public realm

site analysis

After analysing the district and the position the site takes within the district, we zoom-in and relate the conclusions on district level to the level of the site.

On top of this we deeper the analysis with questioning the actual quality these borders, nodes, etc have on the site and the position of the site within the strip.
site within the north-south strip
open morphological structure of the strip
medium section broad section small section
south barriere north barriere

medium section south barriere broad section north barriere small section
understanding the site within the strip

For understanding the ambiguity thats wanted on district level, we have to zoom-in and understand the adjacent parts of the district on the north-south strip.

open morphological structure

If we look at the open morphological structure of the strip we see that there is a division of the wideness of the open morphology. On the southside, the part of the market, which beholds the wideness of the former Rotte. The site itself is very wide sometimes and because of that it floats away sometimes. On the northside the open morphology shrinks to a minimal size and also gets split in two because of the former traintracks (now the project hofbogen).

sufficient green structure

Whats immediately recognisable is the lack of green on the sout part of the strip. The proposal to redesign the big marketarea by the municipality introduces little green fill-ins.

The site itself has an existing sufficient green structure which can be seized as part of the proposed design.

On the north part of the strip the future hofbogen project will bring a refreshing green concept, comparable with the Highline project in New York.
Rotterdam public realm
the site within the strip
site analysis

typological distribution
office building
public building
dwelling with commercial ground floor
patio dwellings
only dwelling
dwelling tower
nodes

If we zoom-in on the site, the historical node on the northside of the Jacobsplaats actually exists out of two nodes. The same appears on the southern node where the border of the Binnenrotte is two times crossed.

borders

The border created by the tunnel of the train appears to be not one border-line, but a border-zone with two border-lines closing the zone.

Both nodes and borders seem the downgrade scale running from north to south. This gradient in scale reflects also in the materialization.

Running from north to south, nodes and borders
downgrade in scale and soften in materialisation

crossing the node seen in time-based experience

The important north-south connection, the connection between the hybrid inner-city and the monofunctional periphery is still blocked. Crossing this node you have to overcome multiple height differences, change your direction, wait for traffic lights, etc.

The time-based experience is not efficient because the experience does not ask for a long use. This obstruction can be solved in the design, but should be as simple as possible in order to not obstruct the now good functional east-west connection. It should speed up the time-based experience.
Rotterdam public realm

touching the ground

site analysis

touching the ground

The red highlighted areas are the spaces where the architectural intervention can land. These four spaces have different identities and atmosphere’s which correlate with the proposed function.

This will be the identity the site will have within the city. The four individual functions that direct relate to the surrounding area.
Rotterdam public realm
sections

site analysis

02 section minimall
visual perception of section
Rotterdam public realm
sections
site analysis

04 ....

.............
05 section longitudinal

This section starts at the mini-mall and runs all the way till the beginning of the market area.
Rotterdam public realm
sections

06 section longitudinal

This section starts at the mini-mall and runs all the way till the beginning of the market area.
Rotterdam public realm

sections

site analysis

07 section longitudinal

This section starts at the mini-mall in the north and runs all the way till the beginning of the market area.
Rotterdam public realm
masterplan proposal

After analysing the city on these three levels, the static city, movements through the city and the people who use and live in the city, we will use this created body of knowledge to start designing the masterplan proposal in order to bridge the step between analysis and architectural design.
interstitial ambiguity as main design theme
(connectivity and separation)

Résumé:
Throughout the analysis it became clear that the site has a certain ambiguity, but this is not clearly expressed and perceived by visitors and users. Ambiguity creates also hybridity!!!!!!

- Morphologically and infrastructurally (for slow traffic) it takes part in the need of connection on the north - south axe.
- Functionally and atmospherically the site tends to empower own identity.

Nowadays in reality this ambiguity is perceived, but the existing connection for slow traffic is not working properly, as shown for example in the analysis of crossing the historical node. Also the quiet introvert atmosphere is of low quality and can be improved or diminished by improving public life on site and in that way giving the high quality atmosphere of the city to the existing community.

1. connecting

Connecting by creating a slow traffic route through the area on the north-south axe and empowering the longitudinal morphology. Also adding programme which corresponds more to the needs of the public or city visitors.

2. separating

Separating or dissociating this long morphology by addressing and empowering the own identity of the site seen within the greater hybrid district.

3. interstitial ambiguity

The design can embody the ambiguity between connecting and separating by creating a clear structure through which the two opposites get more explicit. It could be achieved by making clear decisions through the topics of typomorphology, program, movement and people.
Rotterdam public realm

theme approach

masterplan proposal

The concluding diagram shows the position of our design within the city regarding the subjects of continuity, ambiguity and separation.

program

Following the rehabilitation project of the abandoned railway line in the north as an urban park with focus on leisure, we propose to enhance its importance in the city and make a direct link to the market. Not only by routing or building mass, but also programmatically. With our design we see a possibility to add functions which needs an indoor space.

Scenario. Entering building from the north to the south.

Routes.
1. (main) The continuous route for bicyles and pedestrians entering the building at the high level of Hofbogen, crossing the interior space at the same level through the historical node and then gradually going down to the market square. The elevated public space consists of restaurants, bakery, butchery, permanent mall of vegetables and fish, a public stage, a covered skateboarding area, wild nature forest.

2. The routes were building touch the ground holds functions that relates to the atmosphere of the adjacent surroundings.
**static_morphology**

**strategy_morphology masterplan proposal**

**continuity**

*one longitudinal morphological element:
To empower the connectivity with the other parts on the strip, it will be strong to create one ‘connecting’ element along the axe / border of the Binnenrotte.

**interstitial ambiguity**

*semi-public-private*

*different combined morphological elements:*
The ambiguity can be morphological embodied by a combination of different elements, which together connect and separate the site from the surrounding.

**separation**

*private*

*multiple morphological elements:*
When you create multiple elements you can clearly and easily articulate the site within the surrounding urban tissue.

**conclusion_analysis**

**city form**

1. Ambiguity of continuity and separation of the site, which is reflected in two important nodes. One being the historical node where all the important borders but also traffic lines intersect, and the other node is on the southside of the site and beholds the end of the market and the beginning of the Jacobsplaats.

2. There is an overlap recognisable between the landmark-cloud, the borders and the important nodes. This means that these areas are of high activity.
Rotterdam public realm
design strategies
masterplan proposal

continuity
Marketing function:
butcher, bakery, mall, supermarket, liquor store, market-area, pet-shop
tourism:
hotel, info centre,
Work:
ofices, etc
Cultural functions:
museum, opera, music hall, church, mosque, urban stage

interstitial ambiguity
semi-public-private
Sports facilities:
stadium, health centre, olympic training centre, skateboarding, ski-jump, urban fight-ring, karting, parcours, urban paintball area
Recreational functions:
café, bar, restaurant, playground, park, swimming pool, public bath, cinema, nightclubs, community centre, red-light district, amusement park, gaming
conference centre, urban farming

separation
private
Living:
villa’s, row-houses, flats, high-rise, elderly home
Educational functions:
elementary school, day-care, high school, universities, academy

static_program

conclusion_analysis

programatic distribution

3. Hybrid nodes appear in overlapping points of program-clouds. The concentration of these nodes lay within the contemporary city centre. An interstitial area can be assigned to the zone where the active hybrid city center connects to the monofunctional periphery containing almost only dwellings.
**movements**

4. People tend to walk through active diverse areas.

5. Crossing the historical node, in order to connect the monofunctional periphery with the city centre and vice versa, is on the level of slow traffic almost impossible.

6. The market itself doesn’t feed the Jacobsplaats with continuing activity. This reflects to the question of ambiguity.

**strategies**

**connectivity**

public

solving south-north connection through the site

**interstitial ambiguity**

semi-public-private

creating both a connection on district level on the north-south axe, but also to improve the local routing

**separating**

private

cutting of urban connection, creating a bubble (gated community)
7. Immigrant growth will continue and the urban sprawl will be more equally divided. These immigrants show a trend that they are crossing more and more borders and districts because their operating radius grows.
Rotterdam public realm
first concept

**masterplan proposal**

The design should attach on morphological level to the surrounding and act as a connector on the north-south axe.

**hofbogen**

In relation to the existing Highline park in New York and the Promenade Plantée in Paris, Rotterdam competes with the project called ‘hofbogen’.

This project deals with the abandoned traintracks that used to connect on higher level with the former hofplein station. The project brings new live under the tracks and will bring green live on top.

Our project area is located adjacent to the hofbogen on the south side and tries to connect and extend the typology in order to fill the gap to the market area.

**implicit design**

This first concept however is an implicit answer to the conclusions made at the end of the analysis. The intervention should not be glued to the surrounding context, but be a new fragment in the city. This first concept reacts to much to the urban tissue and fills almost all the void.
Site characteristics: two areas, a big transport border, a trainline and the highline park above the mini-mall.

Besides these physical characteristics the site has the ambiguous character within the strip, continuing and separating.

The intervention should create an explicit answer to the collage city by creating a new fragment.

The longitudinal character of the space reflects the historical entrance of the Rotte river.

The two areas being the hybrid innercity and the monofunctional periphery.

The main focus of the design is to connect on the north-south axe and cross the historical node (for slow traffic pedestrians and cyclists).

1. The main route is a continuous route, connecting the north and south, crossing the node.
   - 70% of the route is in open air (uncovered);
   - easily accessible and the user will have to put no effort to cross;

2. The secondary route is the smallest intervention possible. It’s located on the spot where the node will be crossed and organized by traffic lights.
   - a ‘green wave’ will be applied in order to make sure motorized traffic will not suffer from this intervention;
   - a tram/bus stop will be introduced and directly connected through which they can benefit from each other.
The structure is easily accessible from the Hofbogen on the north, and the market on the south.

A connection will be made with the 'luchtsingel', to make a direct connection with the office district around central station.

Since a tram stop will be included in the design, the relation of the design and the existing urban fabric will be enhanced.

The structure will be accessible from different points in the existing city.

Building mass starts at the Jacobsplaats itself. The morphology of the structure continues.

The intervention should transform the vast complex space into smaller identifiable areas.

The building mass should be less dense when crossing the border.
a. preserve the visual east-west connection along the Goudsesingel - Pompenburg;

b. the visual perception and connection with the market should start after crossing the Goudsesingel. And vice versa with the visual perception and connection of the minimall.

c. the structure should be a continues urban landscape with a clear visual perception of the whole but also of the entrances and the other connections.

d. interaction with the landmarks brings orientation for the user.

Create a green axe referring to the historical blue axe. And at least 50% of the site will be structurally integrated green in the design.
The new structure should soften the extreme transition from the highrise to the lowrise. This results in a not visible gradual blanket that defines the maximal heights of the intervention.

There can be a direct interaction between the public and the private, but there can also be a gradual interaction. For the proposed intervention on the Jacobsplein we choose for both possibilities. This gives the possibility to use the semi-public/private space to interact between the two public levels, one being the public surrounding, the other being the new public north/south route on a higher level. You have to pay for entering the four private functions.
Rotterdam public realm
testing masterplan parameters

*masterplan proposal*

testing the masterplan parameters in section

**horizontal slab**
- over-shadowing most off the public space;
- no solution for the existing public outdoor ground floor space;

**vertical high volumes**
+ buildings flank the route with function;
- to high volume;
- no strong connection with the surrounding;

**compact mass**
+ a compact - medium high - intervention results in a clear distinction between two smaller characters with their own character;
+ cars out of sight by placing them underneath an artificial green landscape;
+ profile towards ‘fortification dwelling/parking’ is small, hard material, etc.;
+ profile towards the building of the eighties is broader, easier, softer, etc.;
- the interaction with the function is small, mostly vertical which doesn’t allow easy connectivity.
Rotterdam public realm
testing masterplan parameters
*masterplan proposal*

**horizontal slab landing on the ground**
- over-shadowing most off the public space;
- no solution for the existing public outdoor ground floor space;

**vertical high volume - only one left**
+ buildings flank the route with function;
- to high volume;
- no strong connection with the surrounding;

**compact mass + conceptual ball added**
Rotterdam public realm
3d testing
masterplan proposal

3d perception of the intervention
suprematism in masterplan proposal

Painting as a suprematist allows to show the masterplan parameters but also gives the possibility to keep the abstraction and show deeper the essence of the masterplan instead of showing a clear architectural drawing which would create limits for further architectural development. This is the main reason why this type of presentation suits the best.

The difference with the original suprematism paintings is the idea behind the composition. These paintings are from every angle, direction or orientation, a beautiful composition. In our representation, because its architecture and fitted within the urban tissue of the real city, the orientation is of importance.

The first abstraction of the painting shows the current situation (train tracks, periphery, underground railway) and historical layers (Rotte). The second shows the routing, the third the intervention and the last shows the different identities.
suprematism and Kazimir Malevich

Suprematism found its base in the application of the fundamental geometric forms, particularly the square and the circle. It originated in 1915 in Russia and was established by Kazimir Malevich. The movement also expressed an interest in concepts that related to non-euclidean geometry, which imagined forms moving through space. A non-objective style of art its simplification of form and use of geometry influenced, among many other things, the development of Constructivism and the Bauhaus.

The style developed as Russia was in a revolutionary state and was an effort to do away with the old and create something new. It was primary developed in the field of painting although its practice extended to poetry and theater. It also revitalized an interest in traditional Russian folk art. The most identified work is Malevich’s White on White, which is composed of an offset white square set inside of another white square.

Suprematism considered the first systematic school of purely abstract pictorial composition in the modern movement, based on geometric figures and was the expression “of the supremacy of pure sensation in creative art”. It is Russian art movement founded (1913) by Kazimir Malevich in Moscow, parallel to constructivism.

According to Malevich, suprematism sought “to liberate art from the ballast of the representational world.” The work of the painter no longer involved representing and creating chromatic harmonies or formal compositions, but rather attaining the limits of painting. It consisted of geometrical shapes flatly painted on the pure canvas surface. The pictorial space had to be emptied of all symbolic content and all content signifying form. It had to be decongested and cleared, so as to show a new reality where thought was of prime importance.

Suprematism changed the future of modern art, architecture, and industrial design, through its dissemination by the Bauhaus and today continues to inspire artists throughout the world.

THE STRIP AND OTHER TEASERS _ manifest

PARCELLATION IN URBANISM AS FAILURE

Our project is an attack against modest, restrained urban design. After the final extremeness of modernity, today’s urbanism has developed an almost universal consensus, based on parcelisation and typo-morphological continuity of the existing. Each site is typically subdivided into smaller plots and clusters of individual operations by respecting an urban grid and resurrecting the procedures on which the traditional city is based. We all undeniably believe this approach is „right“. Our common fear for the big and the monolithic has driven us to idealize the human scale and the composite.

Let us say out loud: the majority of the urban formation we now construct, and the people-friendly language we use, is irredeemably awful, neither intriguing nor surprising. More and more, architects are positioned into demonstrations of peaceful, ego-less coexistence which results into artificial and life-less plans. What we, as architects and urban designers have lost, is our ability to see large, our courage to proclaim large ambitions, our pleasure in being visionaries and our chance to simulate the scenarios „of what if”.

We have to state that the seeming failure of today’s urban design and the case of Rotterdam in particular, offers us an exceptional opportunity to take insane risk, to be bold and ambitious. The city is reinventing itself while being a unique innovative experiment in the context of Europe. It is Fragmented. Collaged. Hybrid. Condracting. It has no history. No structure. We see this identity as a core quality of Rotterdam. We believe in the search for new tools and concepts that are found by anticipating and utilizing the appearance of the city.

SUPRANATIONALISM AND HARDCORISM AS ANSWER TO FRAGMENTATION

In order to reveal our intentions, the true core parameters of the masterplan design, we express them again in a very hand made way - using the suprematist collage style as a prime graphic vehicle. A non-objective style with its simplification of form allowed us to interpret the city as an empty space and have freedom in creating something new where thought is of the highest importance. We are no longer representing fake harmonies or formal compositions, but rather a new rule/order to the existing abstracted fragments.

Our project aims to reconfigure the image of the city centre by inserting the pure hardcore longitudinal element. The linear project: a single piece of architecture that spatially reorganizes its surroundings. It breaks but reassembles. It is blunt, straightforward, explicit, up front. It represents what it presents. No decoration. No crime. No ornament.

The physical relation between the site and the building is raised to a more intense level. We anchor to the place by designing a particular condition through which the building is rooted. Rather than a passive contextual approach, our intervention is a continuous system of porous thresholds that filters exchanges with the varying identities of urban fabric. It should challenge the existing situation, as well as respecting it.

We claim that within this contradicting relationship between urbanism and architecture, we can sustain an experimental syllabus of events. We intend to develop strategies to organize both - independence and interdependence of programmes within a larger entity - in a symbiosis that increases unity but does not compromise specificity. The parts remain committed to the specific spatial characters, to the whole and to each other.

Our goal and nature of the project is to encourage conflict over synthesis, fragmentation over unity, madness and play over careful management while establishing a metaphysical link with the immediate surroundings.