Grow up in the cloud

- Build up an informal network layer in neighborhood like Kanaleneiland

2017 FHK graduation project
**CONTEXT**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood like Kanaleneiland</td>
<td>3</td>
</tr>
<tr>
<td>Government did not ignore</td>
<td>6</td>
</tr>
<tr>
<td>Voice from BREDE School</td>
<td>7</td>
</tr>
<tr>
<td>Build up an informal network layer</td>
<td>8</td>
</tr>
<tr>
<td>For kids</td>
<td>10</td>
</tr>
<tr>
<td>Seeds</td>
<td>13</td>
</tr>
<tr>
<td>What is next?</td>
<td>14</td>
</tr>
<tr>
<td>New neighborhood like Kanaleneiland</td>
<td>15</td>
</tr>
</tbody>
</table>

Reference
Neighborhood like Kanaleneiland

From 2007, Netherlands government has published a list named as “40 probleemwijken (40 Problematic neighborhoods)”\(^1\). On this list, most of these neighborhoods are relatively known by Dutch society, people call them: “black neighborhood” or “cannot park the car there”, “Turkish town”. More and more attention had been raise up by media, knowledge group, governments and so on.

Kanaleneiland is one of member on this list and rather outstanding in all terms of aspect. It is not hard to point out, Kanaleneiland and Overvecht (Utrecht) in recent decades has been keep up the highest criminal rate and unemployment rate, average income has been the lowest in entire Utrecht region. More than 20% of children drop out from high school and stay at home. Average living duration in Kanaleneiland is only 4-5 years\(^2\); this means the neighborhood is extremely unstable. What sounds even more serious is that new residential neighborhood in the west of Utrecht - Leidsche Rijn had received new inhabitants and they all came from Kanaleneiland neighborhood, some people call them “the Kanaleneiland Group”.\(^3\)

\[
\begin{array}{cccccc}
\hline
\hline
Kanaleneiland-Noord & 0.8 & 1.5 & 6.1 & 15.1 & 16.4 & 5.0 \\
Kanaleneiland neighbourhood & 0.8 & 1.4 & 8.6 & 10.1 & 12.7 & 4.0 \\
City of Utrecht & 1.7 & 2.5 & 7.6 & 11.0 & 10.7 & 2.0 \\
\hline
\end{array}
\]


\(^1\) Outcomemonitor Wijkenaanpak Eerste Voortgangsrapportage Totaalbeeld 40 aandachtswijken in Nederland Oktober 2010 (Centraal Bureau van de Statistiek)
\(^3\) Information from Interview inhabitants in Kanaleneiland, on Feb.2017
Table 11.3 – Demographic profile over the lifetime of Kanaleneiland-Noord (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Singles</td>
<td>-</td>
<td>34.3</td>
<td>35.0</td>
<td>41.4</td>
<td>46.0</td>
<td>48.3</td>
<td>52.6</td>
<td>42.0</td>
</tr>
<tr>
<td>Households with children</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>38.8</td>
<td>-</td>
<td>-</td>
<td>36.6</td>
<td>39.0</td>
</tr>
<tr>
<td>Total households (abs)</td>
<td>-</td>
<td>3,055</td>
<td>8,761</td>
<td>8,977</td>
<td>2,947</td>
<td>3,192</td>
<td>3,421</td>
<td>3,153</td>
</tr>
<tr>
<td>&gt; 65 years of age</td>
<td>3.0</td>
<td>8.0</td>
<td>9.9</td>
<td>11.3</td>
<td>13.2</td>
<td>11.2</td>
<td>9.5</td>
<td>9.1</td>
</tr>
<tr>
<td>&lt; 29 years of age</td>
<td>55.3</td>
<td>51.9</td>
<td>49.7</td>
<td>46.8</td>
<td>46.7</td>
<td>53.5</td>
<td>56.5</td>
<td>57.1</td>
</tr>
<tr>
<td>Non-Dutch ethnicity</td>
<td>-</td>
<td>0.6</td>
<td>0.8</td>
<td>3.6</td>
<td>-</td>
<td>38.8</td>
<td>70.3</td>
<td>81.3</td>
</tr>
<tr>
<td>Total inhabitants (abs)</td>
<td>8,566</td>
<td>8,724</td>
<td>8,060</td>
<td>7,209</td>
<td>6,482</td>
<td>7,081</td>
<td>7,714</td>
<td>7,819</td>
</tr>
</tbody>
</table>


* Figures refer to the Kanaleneiland neighbourhood as a whole
- No figures available

Table 11.4 – Income distribution within Kanaleneiland-Noord, the Kanaleneiland neighbourhood and the city of Utrecht (disposable income per year), 1982, 1990, 2000

<table>
<thead>
<tr>
<th></th>
<th>Kanaleneiland-Noord</th>
<th>Kanaleneiland neighbourhood</th>
<th>Utrecht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household income (€, 000 in euros)</td>
<td>10.7</td>
<td>9.5</td>
<td>14.0</td>
</tr>
<tr>
<td>Share of low incomes</td>
<td>-</td>
<td>83.0</td>
<td>34.0</td>
</tr>
<tr>
<td>Share of high incomes</td>
<td>-</td>
<td>17.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Gemeente Utrecht, 1988, 1995, 2002b

* Figures refer to both low and middle incomes
- No figures available

Table 11.6 – Figures on mobility and turnover data within Kanaleneiland-Noord

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>1995</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migration balance</td>
<td>254</td>
<td>280</td>
<td>-370</td>
</tr>
<tr>
<td>Households wanting to move (%)</td>
<td>32.3</td>
<td>49.0</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Source: Gemeente Utrecht, 1995, 1996, 2002a

Table 11.7 – Position of Kanaleneiland-Noord within the city hierarchy

<table>
<thead>
<tr>
<th>Rank</th>
<th>Nieuw-Hoagren</th>
<th>Kanaleneiland (both Noord and Zuid)</th>
<th>Strongest neighbourhood</th>
<th>Utrecht</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>28</td>
<td>1</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Unemployment</td>
<td>4.0</td>
<td>4.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Educational attainment</td>
<td>79.0</td>
<td>92.0</td>
<td>4.0</td>
<td>43.0</td>
</tr>
<tr>
<td>Household</td>
<td>38.0</td>
<td>15.0</td>
<td>15.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Insufficient feelings of safety</td>
<td>49.0</td>
<td>50.0</td>
<td>22.0</td>
<td>35.0</td>
</tr>
<tr>
<td>Inconvenience caused by youth</td>
<td>30.0</td>
<td>52.0</td>
<td>10.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Weak social cohesion</td>
<td>44.0</td>
<td>58.0</td>
<td>19.0</td>
<td>39.0</td>
</tr>
<tr>
<td>Weak political involvement</td>
<td>30.0</td>
<td>40.0</td>
<td>14.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Pollution</td>
<td>34.0</td>
<td>59.0</td>
<td>11.0</td>
<td>34.0</td>
</tr>
<tr>
<td>Negative about traffic</td>
<td>37.0</td>
<td>43.0</td>
<td>31.0</td>
<td>37.0</td>
</tr>
<tr>
<td>Negative about dwelling</td>
<td>9.0</td>
<td>18.0</td>
<td>1.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Total score</td>
<td>3.3</td>
<td>1.0</td>
<td>10.0</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: Gemeente Utrecht, 2002b
All of these index and numbers have drawn kanaleneiland a very bad repetition to Dutch main stream society. In another word, the gap between Kanaleneiland and Dutch main society has become bigger and bigger in nowadays.

How come place like Kanaleneiland became as such?

In 1950s, the modernism type neighborhood become very popular in west Europe, due to the post war time’s needs, large amount of residential area has been constructed and for the same reason with Bijmer in Amsterdam, car orientated layout and infrastructure was very welcome in that time. Among young people (20 years – 35 years old), it was very popular to live in the neighborhood like Kanaleneiland. 4

However, it wasn’t last very long, “small housing movement” started in 1970s, most of people would like to live in the edge of the city and have their private garden. Market has been changed in the end of 1970s, CIAM type neighborhood (Kanaleneiland) became unattractive and in the same time, economic crisis influenced afterwards environment maintains.

In 1980s, large amount of immigrants (Moroccans and Turkish had the biggest share) rush into Netherlands. Kanaleneiland with its cheap price and rather big family type flat layout became these immigrants’ best choice. Since then, “black neighborhood” as a name has been spread all over the country. 5

Diagram about immigrants cycle in Netherlands, design by Li Gubai

---


5 <Vooruit in Kanaleneiland Zuid Aanpak Kanaleneiland Zuid 2010-2020>, Kanaleneiland Zuid Vernieuwt
Government did not ignore

Of course, Dutch governments did not ignore all these issues.

“Kanaleneiland is one of 40 special concerns neighborhood in The Netherlands since 2010. High crime rate, low employment, low educational level, poverty, immigrants segregation are the main issues....

- CBS, <Outcomemonitor Wijkenaanpak Eerste Voortgangsrapportage Totaalbeeld 40 aandachtswijken in Nederland Oktober 2010>

In early 1990s, large amount of efforts had been devote into solving issues in Kanaleneiland, 8 million euro a year has been spend on increase the police force and society control. But it only gained the distance between different communities.

In fact, during 1990s, due to immigrants families usually have a bigger family size (5-6 people in one family) the population in Kanaleneiland has increased a big amount. Nowadays, it is the one of most dense area in Utrecht. 

In 2000s, more and more attention from different knowledge group has start make research in CIAM type neighborhood.

“Kanaleneiland has too much public space has too little private involvement. Compare with apartment, I think the public space is more valuable to be concerned”

- SITE-UD, Leo Versteijlen

Large amount of population growth leads out result that more green space occupied by parking space, apartment construction. Public space became less and less, quality of public space became lower and lower.

![Car parking occupied large amount of public space](Photo by Li Gubai)
People start realized that establish communication between different nationality and different social groups in the neighborhood become more and more important.

“Nowadays, Kanaleneiland became a transition place for many immigrants, due to the unstable inhabitants, all kinds of society issues take place. Schools, especially Brede schools should be the key factor to make neighborhood a better place.”
- <Vooruit in Kanaleneiland Zuid Aanpak Kanaleneiland Zuid 2010-2020>

Brede School is so called community school as a concept has been used in many different area, first was in north Europe.

“A wide range of activities for children, parents, neighbors and other specific target groups determines the contents and organization of community schools. Community schools team up with as many partners as possible to develop activities. Each community school chooses its own organizational structure:

- Complete day-programs or periodical after-school activities for children and young people;
- Combinations of educational activities within and outside the school;
- Various and diverse activities for parents and the community;
- Partners in different locations or most in one building
- Different ways to organize staff, management and board functions.

Most important is that the structure should be designed to serve the contents and targets.”
- <Community Schools in the Netherlands > NEDERLANDS JEUGD INSTITUUT

Voice from BREDE School

In some neighborhood, Brede School as a concept went very successfully; it is not only worked as an educational function but also helps improve neighborhood cohesion.

However, this do not mean for all neighborhood.

“Parents don’t know each other, also do not have chance to know each other...... Communication is more urgent issue.”
“Parents and students as well as neighborhood need some facilities, it could mean simple as a roof for waiting for kids...”
“......Indeed, as schools, we don’t have the capability to make the neighborhood become better, spatially and sociologically, at least not only by ourselves.”

- Lucesschool director, Jolanda Snoek

Like Kanaleneiland has very weak economic base or very policy foundation, Brede School does not have enough money or fertilities to support neighborhood activities as they promised. Brede School as a concept does not really work in certain practical level, for example: lacking of space. If I could be more specific to give an example, there is huge interest from students father also would like to get the Dutch language course study (few mother has been in the course already). Another one would be there is no space for parents waiting for their kids and of course you may imagine, in the cold rain, nobody would like to be smile and open for a talk to each other and spend some time outdoor.

In short, there is not enough space for some communication to happen.
Build up an informal network layer

However, it is really a truth that there is not enough space in Kanaleneiland?

In the CIAM type neighborhood (Kanaleneiland as typical), endless repetition of apartment blocks formed an endless “open square” in Kanaleneiland. These so called open square, filled with cars, concrete, drug dealer and fixed, unattractive “toy”.

Extremely mono-functional layout does not encourage people to stay in one place. People run from A to B only in order to finish their check list. What are more important, 80% inhabitants are from outside of Netherlands, they are forced to accept this western modernism communication formula and in the same time, most of them have lost their original way of communication.

What is interesting is that a little Turkish fresh market became the most popular hub in entire region. Elderly Turkish man enjoy the sunshine and black tea, Moroccans lady in the market try to pick up the best carrot for dinner and in the same time they were complaining about their husband with other lady. Worth to be mention, this outdoor market is totally illegal because it takes place on the public street.

How about set up much more these kind of “Turkish outdoor market” and connect them together?

A new idea from my research is to extract these Brede School’s public responsibility and situates them as programs into empty open space in Kanaleneiland neighborhood; connect them together to let a communication network be facilitated. Different public function will like stars, separated all over the neighborhood and they are going to replace parking plot, empty garden, a special routine connect them. It could stay in a small scale and quite informal, but the goal is to let people have place to start talk to each other.

Diagram draw by Li Gubai
For kids

Inhabitants, especially kids will spend more time outdoor. To be more specific, different urban spatial quality has been considered apply to different age groups.

In general, there are three different age groups:

Group a. Start from school, fit for 0-10 year’s old kids. Brede School’s public functions are directly put in the empty spot close to schools.

Group b. Connections. They fit for 10 – 15 year’s old teenagers. These places usually program by nature elements like sand or trees, offer children a place to take an adventure by themselves.

Group c. Large public program, fit for 15-25 years’ old young people. There are some rather large public function could be placed near canal or large parking plot and so on. Public function could be swimming pool, stage on water or big Open Square.

In order to explain the urban concept in the architecture scale, I have chosen Group 1 as my experimental group and site is in front of Lucsschool.

In front of Lucsschool, currently are in general open outdoor space, which contains 3 sports field (basket ball) and some grass land, it is about 170m x 78m. After interview with the director of school, Jolanda Snoek, 7 different programs which is needed in current situation has been chosen to make this experimental design.

A ice cream shop, close to basket field offers some old drink when children are using the playground.

A parents building, which also functions as a community center, parents will have a place to have meeting with each other or teachers, while they waiting for their kids. Some small meeting room inside, allow some community negotiation happen under a good condition.

A gallery, function as exhibition corridor could be used in order to show students work or host some exhibition for local inhabitants.

Three adult class rooms, offer parents some place to practice their Dutch language or other skills.

A local 24 hours shop, sells Turkish food. This shop also function as safety guards which guarantee users safety issue.

Six temporary offices, allow young workers or schools has flexible place to work. It will be expected to create turn over for park’s maintains.

A local restaurant, offer parents and inhabitants a place to stay while their children are playing in the field.

In order to attract more kids come to the field, several roof interventions have take place. Program of roof top are rather flexible and can be temporary, like skating board slope, tree swing, outdoor theater
and so on, many trees will be planted in the middle of the field. All these programs are connected by ramps going through among trees. Therefore a playground in the air (first floor) will be created, children play in the air of a forest, learning from nature. I call it “grow up in the cloud”
South side entrance render, design by Li Gubai
Seeds

“Grow up in the Cloud” will be the first project as seeds kick off entire Kanaleneiland informal network construction. It supposes to develop and spread over the neighborhood like octopus. Children and other inhabitants will have more chance to communicate and have a better condition to communicate. On another side, a show case will be established in Netherlands. The name “black neighborhood” will be gradually no longer exist, more diverse people will choose to live in this kind neighborhood, the distance between immigrants and Dutch main stream society will get closer.

What is next?

Of course there are some issues remained in this research. Now I have already defined for myself what does neighborhood like Kanaleneiland needs, but how much intervention do they really need? Indeed, how big is the miss communication gap between immigrants society and Dutch main stream society, I believe that could be quantified. Fackton is an economic consultancy company in Rotterdam, in next step it is important to define some specific numbers and index for this project, in another words, quantify the gap. A series KPI will be invented to evaluate in which term or aspect of communication does Kanaleneiland really need. If this movement can be self-support by neighborhood themselves or it really needs Dutch governments to feed.
**New neighborhood like Kanaleneiland**

As I have mentioned in the beginning of this paper, there are 39 neighborhood like Kanaleneiland spread all over Netherlands and I believe there are more immigration neighborhoods like Kanaleneiland situated in CIAM type residential area in the world. “Grow up in the Cloud” is not only one project, I believe it more like a method could apply to many other places. By adding another layer (scale) of programs depending on inhabitants’ specific demands into neighborhood like Kanaleneiland, it will rebuild the (informal) communication network to help entire community become more stable and more resilient.

In this case, “Brede School” and “children” are key elements I have found for Kanaleneiland specifically; in other neighborhoods they could have different aspects.

However, I do believe, the research process could follow: from generic (Netherlands immigrants issue) to specific (Kanaleneiland immigrants issue), from specific (Kanaleneiland parameter) to general (research/design method), from generic research/design method) to specific (apply to another case study with new specific parameter).
Reference

Visit list

Background research

Wim Beelen, area manager for spatial economic development in the Kanaleneiland area.
- Society issue in Kanaleneiland
SITE-UD, Leo Versteijlen.
- Workshop about Kanaleneiland area development
Ton Venhoeven, VenhoevenCSarchitecture+urbanism
- Immigrants issue in Netherlands.

Method research

Pieter van kruysbergen,
- Kanaleneiland area development research
Taojia,
- Beijing Hutong communication network research
SITE-UD, Leo Versteijlen
- Kanaleneiland area development urban concept
Jos willem van oorschot, VenhoevenCSarchitecture+urbanism
- CIAM type neighborhood research

School specialist

Jolanda Snoek, Lucsschool director.
- Problem of Lucsschool
- Problem of kids in Kanaleneiland
- Needs from Lucsschool

Design:

Program advisor

Dominique Rethans, Faktom.
- What is needed in Kanaleneiland
Design advisor

Gert Kwekkeboom, The Cloud Collective

- Project mentor

Jos willem van oorschot, VenhoevenCSarchitecture+urbanism

- Project advisor

SITE-UD, Leo Versteijlen

- Urban quality advisor

Engineer advisor

Peter Rugebregt, VenhoevenCSarchitecture+urbanism

- Playground in the air, concept engineer advisor

Arjan Pot, VenhoevenCSarchitecture+urbanism

- Playground in the air, concept engineer advisor

Robin Boenning, VenhoevenCSarchitecture+urbanism

- Playground in the air, ramp column concept engineer advisor

Tjeerd Hellinga, VenhoevenCSarchitecture+urbanism

- Playground in the air, water proof engineer advisor