Preteen use and perception of public space in Utrecht in 1996, 2016 and into the future.

Revitalizing urban social structures by building on child-friendly spatial characteristics.
Fez, Morocco - An anecdote on unrestricted independent child mobility in high urban density.

A tour of the city by a 10 year old ‘faux guide’ gave a more authentic experience than the commercial shopping-spree offered by the official guide, while it still included many of the same highlights.

Regenerating urban social structures by building on child-friendly spatial characteristics.
1. Problem definition: On boredom between the 'toppled high-rises'

'You try to make the first scratch in the varnish, because everything was sterile'
Joris van Casteren on growing up in new-town Lelystad, OVT, radio 1, 4 October 2015

Parkwijk-noord, Utrecht. Photo by Itsramon, 2007, Wikimedia Commons

Regenerating urban social structures by building on child-friendly spatial characteristics.

İhsan Deniz Kılıçoğlu - MSc5 P5 presentation - Aug 2018
1. Problem definition: Shrinking childhoods

‘The right to roam’: Shrinking childhoods as presented in a 2013 article on Sheffield, UK, in the Independent, 2013, illustration taken from Karsten, 2016)

Spatial freedom of children decreased sharply during the 20th century due to the growth of motorised transport.

According to current research childhoods are continuing to shrink, due to social and technological changes

The question for urban planners and designers is: How can urban public space stimulate children to play outside, make more (diverse) friends, participate in a democratic society, and make contact with different aspects of the urban landscape?

Regenerating urban social structures by building on child-friendly spatial characteristics.

İhsan Deniz Kılıçoğlu - MSc5 P5 presentation - Aug 2018
My neighborhood at age 8-9: Lunetten, Utrecht; ‘village in the city’.

In 1997 I got a pair of Roces Impala 62’s.

Me (right) and some of my friends from school and the neighbourhood on my 9th birthday.
2. Research questions

so...

*What is public space as children’s space?*

and,

*How do children in Utrecht use and perceive public space?*

*How have socio-spatial “play patterns” changed in residential neighborhoods of Utrecht as compared with 1996?*

and,

*(How) do the spatial particularities of these neighborhoods relate to these changes?*

and finally:

*What design patterns can we distil from these particularities to use in an urban regeneration plan to improve the sustainability of public space as children’s space?*
Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.
4. Methodology. Techniques to answer research questions

What is public space as children's space?

Theoretical understanding:
- Literature study

Personal understanding:
- Memories & photographs of childhood
- Conversations with old classmates & friends

How do children in Utrecht use and perceive public space?

On-site observation:
- Mapping play activity on wed. & sun.
- Photographic documentation
- Conversations with children

Social perspective:
- Social mapping workshops at 3 schools
- Questionnaire

(How) do the spatial particularities in these neighborhoods effect the use of public space by children

Urban space analysis:
- Typo/morphological study
- Mapping functions
- Space Syntax
- Mapping relation public/private

Desk analysis:
- Statistical analysis of social maps
- Qualitative analysis of social maps

Regenerating urban social structures by building on child-friendly spatial characteristics. İhsan Deniz Kılıçoğlu - MSc5 P5 presentation - Aug 2018
4. Methodology. Techniques to answer research questions

How have socio-spatial “play patterns” changed in residential neighborhoods of Utrecht as compared with 1996?

Historical understanding:
- In-depth interviews with former residents resulting in maps. (snowball)
- Qualitative analysis of these maps in comparison to those of current children.

Other research:
- Collecting data from municipality
- Collecting data from Utrechts Archief

(How) do the spatial particularities of these neighborhoods relate to these changes?

Empirical research:
- Qualitative analysis of the relations between changes in use to changes in urban structure.

Other research:
- Literature research on sustainability of public space as a social medium.

What design patterns can we distil from these particularities to use in an urban regeneration plan to improve the sustainability of public space as children’s space

Planning strategy:
- Collecting patterns and guidelines from previous research questions
- Visualizing patterns and guidelines

Design strategy:
- Designing small-scale interventions to test the patterns and guidelines

Regenerating urban social structures by building on child-friendly spatial characteristics.

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Regenerating urban social structures by building on child-friendly spatial characteristics.

İhsan Deniz Kılıçoğlu - MScS P5 presentation - Aug 2018
Regenerating urban social structures by building on child-friendly spatial characteristics.
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Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.
5. Analysis 5. Space Syntax - Choice over time

Regenerating urban social structures by building on child-friendly spatial characteristics.

İhsan Deniz Kılıçoğlu - MSc5 P5 presentation - Aug 2018
School mapping workshops

Regenerating urban social structures by building on child-friendly spatial characteristics.
7. Results  1. Validation with observation

Example of an individual map.

Reach & favourite play areas + observations

Regenerating urban social structures by building on child-friendly spatial characteristics.

İhsan Deniz Kılıçoğlu - MSc5 P5 presentation - Aug 2018
# Results

## 2. Statistical analysis: Sexes

<table>
<thead>
<tr>
<th></th>
<th>h101 Total av</th>
<th>Indep. reach (ha)</th>
<th>School friends</th>
<th>Neigh. friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>length route (m)</td>
<td>696.78</td>
<td>63.52</td>
<td>7.12</td>
<td>3.02</td>
</tr>
<tr>
<td>median</td>
<td>551</td>
<td>37.6</td>
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<td>5386.03</td>
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<td>73.39</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>h46 Boys av</th>
<th>Indep. reach (ha)</th>
<th>School friends</th>
<th>Neigh. friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>length route (m)</td>
<td>697.82</td>
<td>72.17</td>
<td>6.11</td>
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<td>5</td>
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<td>6196.58</td>
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<tr>
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<td>562.77</td>
<td>78.72</td>
<td>3.57</td>
<td>2.51</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>h55 Girls av</th>
<th>Indep. reach (ha)</th>
<th>School friends</th>
<th>Neigh. friends</th>
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<td>68.62</td>
<td>3.86</td>
<td>3.55</td>
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</tbody>
</table>

---

**Regenerating urban social structures by building on child-friendly spatial characteristics.**

İhsan Deniz Kılıçoğlu - MSc5 P5 presentation - Aug 2018
# Results: Statistical analysis - Siblings

<table>
<thead>
<tr>
<th>School sibling</th>
<th>Sibling to school</th>
<th>Shops</th>
<th>Mode</th>
<th>No. home</th>
<th>Mean distance to school (m)</th>
<th>Mean length route (m)</th>
<th>Mean reach the school friend</th>
<th>Neighbourhood friend concentration</th>
<th>Large park courthard</th>
<th>Percent % under 14</th>
<th>Vghsfl</th>
<th>Nearest resident</th>
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<tbody>
<tr>
<td>n24</td>
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<tr>
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<td>648.16</td>
<td>71.42</td>
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<td>n21</td>
<td>2 or 3 sib.</td>
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<tr>
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<td>6</td>
<td>3</td>
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<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Regenerating urban social structures by building on child-friendly spatial characteristics.
Spatial characteristics have more influence on the number of friends and independent mobility than going to school alone or living in an area with a high concentration of children!

Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.

Girls (n=55)
Average Area = 56.4 ha (r = 425m)
Median Area = 27.3 ha (r = 295m)
Neighbourhood friends = 3.3

Boys (n=46)
Average Area = 72.1 ha (r = 480m)
Median Area = 41.1 ha (r = 366m)
Neighbourhood friends = 2.7

Living near a large park (n=26)
Average Area = 122.7 ha (r = 625m)
Median Area = 101.5 ha (r = 570m)
Neighbourhood friends = 4.1

Living near a courtyard (n=28)
Average Area = 57.2 ha (r = 425m)
Median Area = 14.6 ha (r = 215m)
Neighbourhood friends = 4.6

Living near a large park doubles the independent reach and adds one neighbourhood friend on average.

Living near a courtyard reduces independent reach, but adds two neighbourhood friends on average.
2. Quantitative analysis: Making friends

Living on a courtyard adds two friends from the neighborhood on average!

Regenerating urban social structures by building on child-friendly spatial characteristics.
7. Results. 2. Quantitative analysis: Making friends

- Courtyard: high concentration
- Park: low/medium concentration
- 'Island': high concentration
- Square: medium concentration
- School: medium concentration
- Own school: -1
- If other: +?
- Sports fields/club: low/medium concentration

Regenerating urban social structures by building on child-friendly spatial characteristics.
7. Results

3. Qualitative analysis: Changing preferences & persistent problems

Popular play spaces. red = girls, green = boys, purple = 1996

Negative spaces in Lunetten

Regenerating urban social structures by building on child-friendly spatial characteristics.
<table>
<thead>
<tr>
<th><strong>block / courtyard</strong></th>
<th><strong>‘buurt’</strong></th>
<th><strong>neighb. / village</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>play</strong></td>
<td><strong>play</strong></td>
<td><strong>play</strong></td>
</tr>
<tr>
<td>- swing &amp; slide</td>
<td>- functional (motor) play</td>
<td>- exploration, formal knowledge</td>
</tr>
<tr>
<td>- functional (motor) play</td>
<td>- fantasy play</td>
<td>- (market) square as “totem pole”</td>
</tr>
<tr>
<td>- fantasy play</td>
<td>- exploration, emplaced knowledge</td>
<td>- community center, library, theater</td>
</tr>
<tr>
<td>- imitation play</td>
<td>- (informal) sports</td>
<td>- clear boundary public / private</td>
</tr>
<tr>
<td><strong>social</strong></td>
<td><strong>social</strong></td>
<td><strong>social</strong></td>
</tr>
<tr>
<td>- semi-public enclosed space</td>
<td>- small (play) square or ‘meent’</td>
<td>- participation of children in civic life</td>
</tr>
<tr>
<td>- ‘front door’ for neighbours</td>
<td>- front door for visitors</td>
<td>- organized clean-up activity</td>
</tr>
<tr>
<td>- high inter-visibility public-private</td>
<td>- some inter-visibility public-private</td>
<td>- shopping street with local trades</td>
</tr>
<tr>
<td>- audible connection public-private</td>
<td>- local legends, emplaced knowledge</td>
<td>- diverse urban landscape</td>
</tr>
<tr>
<td>- co-ownership with residents</td>
<td>- co-maintenance with municipality</td>
<td>- network of play stretches &amp; spots</td>
</tr>
<tr>
<td>- “furnishing for togetherness”</td>
<td>- corner store, ice cream van</td>
<td>- separation of traffic by speed</td>
</tr>
<tr>
<td>- diverse housing typologies</td>
<td>- mixed-use with small workshops</td>
<td>- safe pedestrian crossings</td>
</tr>
<tr>
<td><strong>space</strong></td>
<td><strong>space</strong></td>
<td><strong>space</strong></td>
</tr>
<tr>
<td>- play space at least 300m²</td>
<td>- pluri-formity of ‘play stretches’</td>
<td>- open school yards</td>
</tr>
<tr>
<td>- at least 15m wide</td>
<td>- shared space or wide sidewalks</td>
<td>- space for organized group activities</td>
</tr>
<tr>
<td>- adequate light entrance</td>
<td>- minimized through traffic</td>
<td>- isolated spaces for privacy</td>
</tr>
<tr>
<td>- multi-chambered</td>
<td>- unprogrammed spaces</td>
<td>- spaces for teens, adolescents</td>
</tr>
<tr>
<td>- high visual depth</td>
<td>- sport pitch for 2-8 players</td>
<td>- extensive cycle network</td>
</tr>
<tr>
<td>- places to hide</td>
<td>- places to meet friends</td>
<td>- vantage point(s)</td>
</tr>
<tr>
<td>- (bridged) height differences</td>
<td>- access to public transport</td>
<td>- access to natural environments</td>
</tr>
<tr>
<td>- place to gaze at the sky</td>
<td>- - diverse micro-climates</td>
<td>- diverse environments to explore;</td>
</tr>
<tr>
<td><strong>nature</strong></td>
<td><strong>nature</strong></td>
<td>- diverse plants at eye level children</td>
</tr>
<tr>
<td>- non-toxic plants: ground cover, shrubs, vines, climable trees</td>
<td>- fauna: fish, amphibians, squirrels</td>
<td>- fauna: farm animals, mammals in</td>
</tr>
<tr>
<td>- fauna: insects, worms, spiders, birds, bats, cats, dogs, chickens</td>
<td>- allotment gardens</td>
<td>- natural habitat, meadow birds</td>
</tr>
<tr>
<td>- spice / vegetable garden greenhouse</td>
<td>- collecting flowers, berries, nuts</td>
<td>- experience transhumanism</td>
</tr>
<tr>
<td>- water source</td>
<td>- play or fish in ditches, ponds</td>
<td>- farmers market</td>
</tr>
<tr>
<td>- fire pit</td>
<td>- trees to climb, build tree huts in</td>
<td>- petting zoo</td>
</tr>
<tr>
<td><strong>material</strong></td>
<td><strong>material</strong></td>
<td><strong>material</strong></td>
</tr>
<tr>
<td>- yard: grass, sand, earth, wood chip</td>
<td>- squares: mix of hard &amp; soft material</td>
<td>- squares: (natural) stone, brick</td>
</tr>
<tr>
<td>- path: compacted gravel, stone</td>
<td>- bike paths: asphalt, concrete</td>
<td>- street &amp; bike path: asphalt</td>
</tr>
<tr>
<td>- play material; sand, clay, pebbles, twigs, cones, leaves, nuts, shells</td>
<td>- sidewalk detailing: stoops, alcoves, stairs, canopies, corners</td>
<td>- toy library or sharing group</td>
</tr>
<tr>
<td>- re-using household ‘waste’</td>
<td>- storage box at play squares / streets</td>
<td>- geocaches</td>
</tr>
<tr>
<td>- shared storage shed</td>
<td>- collecting ‘waste’: paper, glass jars</td>
<td>- children’s street market</td>
</tr>
</tbody>
</table>

Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.
Design assignment: Lunetten

Regenerating urban social structures by building on child-friendly spatial characteristics.
**block / courtyard**

- swing & slide
- functional (motor) play
- fantasy play
- imitation play

**social play**

- semi-public enclosed space
- front door for neighbours
- high inter-visibility public-private
- audible connection public-private
- co-ownership with residents
- "furnishing for togetherness"
- diverse housing typologies

**space**

- play space at least 300m²
- at least 15m wide
- adequate light entrance
- multi-chambered
- high visual depth
- places to hide
- (bridged) height differences
- place to gaze at the sky

**nature**

- non-toxic plants: ground cover, shrubs, vines, climbable trees
- fauna: insects, worms, spiders, birds, bats, cats, dogs, chickens
- spice / vegetable garden
- greenhouse
- water source
- fire pit

**material**

- yard: grass, sand, earth, wood chip
- path: compacted gravel, stone
- play material: sand, clay, pebbles, twigs, cones, leaves, nuts, shells
- re-using household ‘waste’
- shared storage shed
Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.
Relevance

Children between the ages 5 and 15 often constitute less than 15% of the population. They must therefore travel greater distances to maintain social relations than their parents. However, their social use of public space is much less understood. This research adds to current debate on spatial freedoms of urban children.

"By their presence and their games, by invading the public spaces, they are capable of modifying the short-sighted behaviour of us adults, forcing us to drive more carefully, [...] to show more respect for the environment in which we live and where our children and grandchildren will live."


Linda Peters (2017) “Urban design van de gezonde stad” – Jane Jacobs (Lombok) vs Clarence Perry (Lunetten)

Regenerating urban social structures by building on child-friendly spatial characteristics.
Regenerating urban social structures by building on child-friendly spatial characteristics.