CHILD-FRIENDLY ENVIRONMENTS

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YOUR CHILDHOOD EXPERIENCES?
Classic studies about environmental childfriendliness
ROGER HART (1979) CHILDREN’S EXPERIENCES OF PLACE

FIGURE 4-11: CHILDREN’S PATHS AND SHORT CUTS (i.e. frequent paths, not used by adults). Direction from origin (i.e. child's home in all cases).
ROBIN MOORE (1986) CHILDHOOD’S DOMAIN

https://naturalearning.org/
Indicators of environmental quality defined by children

POSITIVE SOCIAL QUALITIES
- Social integration
- Freedom from social threats
- Cohesive community identity
- Secure tenure
- Tradition of community self-help

NEGATIVE SOCIAL QUALITIES
- Insecure tenure
- Racial tensions
- Sense of political powerlessness
- Fear of harassment and crime
- Boredom
- Social exclusion and stigma

POSITIVE PHYSICAL QUALITIES
- Geographic isolation
- Lack of basic services
- Trash/litter
- Lack of varied activity settings
- Heavy traffic
- Lack of gathering places

NEGATIVE PHYSICAL QUALITIES
- Green areas
- Provision of basic services
- Variety of activity settings
- Freedom from physical dangers
- Freedom of movement
- Peer gathering places

Indicators of environmental quality defined by children
FENCED CHILDHOOD?
PROBLEMS CONNECTED TO CHILDREN’S MOBILITY RESTRICTIONS

INDIVIDUAL

- Physical development (Hüttenmoser 1995; Amstrong 1993; Davis & Jones 1996)
- Social development (Prezza et al 2001)
- Cognitive development (Biel & Torell 1977; Blades 1989; Rissotto & Tonucci 2002)
- Emotional development (Kong 2000; Corbishley 1995)

SOCIETAL

- Time used for chauffering (Tillberg Mattson 2000)
- Mothers’ working (Gershuny 1993)
- Traffic jams (Bradshaw 1999)
ENVIROMENTAL CHILDFRIENDLINESS

Kyttä (2003)

Independent mobility

Number/diversity of actualized affordances

low  high

WASTELAND  BULLERBY

CELL  CLASSHOUSE
Theoretical background:

Gibson’s ecological psychology - a nondualistic understanding of persons-in-context
AFFORDANCE 'SPECTACLES'
AFFORDANCES OF URBAN ENVIRONMENT
Possibilities for independent mobility reveal many affordances. The actualization of affordances motivates further exploration and mobility in the environment.

Any environment where children are allowed to be a part of every day life.
Affordances of every day life

Negative affordances: risks and dangers

WHY BULLERBY?

according to Astrid Lindgren, Swedish writer

Social affordances

Duties as affordances
In spite of mobility restrictions, the environment appears as a rich source of affordances. The awareness of affordances can be based on second hand information.
COMPARISON OF VARIOUS SETTINGS IN FINLAND AND IN BELARUS

Number/diversity of actualized affordances

- **low**
  - Desert
  - Cell
  - Contaminated Town
  - Rural Village
  - Small Town

- **high**
  - Bullerby
  - Glasshouse
  - City

Independent mobility

- **low**
  - Small Town
  - Rural Village

- **high**
  - City

FINLAND

BELARUS
BULLERBY MODEL HAS BEEN USED TO ADVISE CHILD-FRIENDLY PLANNING AND DESIGN
A GENERAL MODEL FOR HUMAN-FRIENDLY ENVIRONMENT?
INDICATORS OF ENVIRONMENTAL QUALITY DEFINED BY CHILDREN

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INDICATORS OF ENVIRONMENTAL QUALITY DEFINED BY CHILDREN
FINLAND THE TOP COUNTRY IN CHILDREN’S INDEPENDENT MOBILITY!
THE DECREASE OF CHILDREN’S INDEPENDENT MOBILITY IN 20 YEARS IN FINLAND

Decrease in CIM
- In cities: not significant
- In countryside: highly significant

Kyttä et al. (2015)
PLACE-BASED APPROACH IN CHILD-ENVIRONMENT STUDIES
In Lauttasaari there are not many places to hang outdoors with friends. This is almost the only place.

Quite okey place for biking!

Cool forest! If this falls down, so will you!

I would appreciate a better skate board park, cause it is becoming a bit rotten. So please invest a few euros there..

Here adults hit the gas pedal

Here I crashed with my skateboard for the first time

Kids out-survey in Helsinki

1100 respondents

GRID-ANALYSIS OF ENVIRONMENTAL CHILDFRIENDLINESS

SCHOOL TRAVEL MODES & ROUTES

FINLAND JAPAN COMPARISON
CONTEXTUAL DIFFERENCES

3836 meaningful places with 13,264 affordances from Helsinki, Finland and Tokyo, Japan (Kyttä et al, 2018)

Finland
- More positive affordances
- More social affordances
- More emotional/contextual affordances

Japan
- More functional affordances
  - Especially for recreational and competitive sports and games
THE LOCATION OF MEANINGFUL OUTDOOR PLACES

Finland
- Average distance from home: 2.4 km
- 67% journeys made actively
- 7% with adults

Japan
- Average distance from home: 1.1 km
- 91% journeys made actively
- 13% with adults
- Concentrated more around schools
Behavior setting refers to a set of social codes of behavior in a given context (Barker 1968).

Here: Clusters of affordances that are identified by a group of children.
## EXPERT AUDIT
- Classification of outdoor behavior settings by experts

<table>
<thead>
<tr>
<th>Place function</th>
<th>Openness</th>
<th>Community</th>
<th>Land use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indoor</td>
<td>Outdoor</td>
<td>Child-specific</td>
</tr>
<tr>
<td>Shopping mall</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Small shop</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bookstore</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Game/DVD shop</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Karaoke</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>McDonald’s/Restaurant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cram school</td>
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<td></td>
<td></td>
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<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Field</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Forest</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Beach</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>River bank</td>
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<td></td>
<td></td>
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<tr>
<td>Pond</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Biotope</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports hall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports field</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking lot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Train station</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vacant lot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction site</td>
<td>(Fin)</td>
<td>(Jap)</td>
<td></td>
</tr>
<tr>
<td>Shrine/church</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the table, the Openness column indicates whether the place is indoor, outdoor, or a mix. The Community column separates settings into Child-specific and Shared. The Land use column lists the type of land use, with categories such as Commercial, Educational, Recreational, Traffic, and Other.
BEHAVIOR SETTINGS IN HELSINKI AND TOKYO

In both countries: Outdoor settings shared with other user groups dominate

In both countries: Indoor and commercial settings perceived most positively, traffic areas most negatively

<table>
<thead>
<tr>
<th>The type of behavior setting</th>
<th>Finland (n, %)</th>
<th>Japan (n, %)</th>
<th>Difference between the countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indoor</td>
<td>30.9% (n=51)</td>
<td>34.2% (n=66)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Outdoor</td>
<td>57.3% (n=96)</td>
<td>58.2% (n=93)</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>11.8% (n=19)</td>
<td>7.6% (n=12)</td>
<td></td>
</tr>
<tr>
<td>Communality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared</td>
<td>78.2% (n=129)</td>
<td>83.5% (n=135)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Child specific</td>
<td>21.8% (n=36)</td>
<td>16.5% (n=27)</td>
<td></td>
</tr>
<tr>
<td>Land use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational</td>
<td>22.9% (n=37)</td>
<td>16.5% (n=27)</td>
<td>$X^2 = 24.6, df = 5, p = .000$</td>
</tr>
<tr>
<td>Commercial</td>
<td>21.9% (n=36)</td>
<td>26.6% (n=41)</td>
<td></td>
</tr>
<tr>
<td>Recreational</td>
<td>27.6% (n=45)</td>
<td>30.4% (n=47)</td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>22.9% (n=37)</td>
<td>3.8% (n=4)</td>
<td></td>
</tr>
<tr>
<td>Traffic</td>
<td>3.8% (n=6)</td>
<td>15.2% (n=24)</td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>1.0% (n=2)</td>
<td>7.6% (n=12)</td>
<td></td>
</tr>
</tbody>
</table>

Japan: Commercial, recreational, traffic and religious settings more common
Finland: Natural and educational settings more common
EXAMPLE OF A BEHAVIOR SETTING:
SHOPPING MALL

189 behavior settings in Helsinki and Tokyo

Here: a shopping centre in Helsinki
WHERE ARE POSITIVE EXPERIENCES LOCATED?

Land use around positive place locations of various age groups (n~4000)
(Laatikainen et al. 2017)
PLACE-BASED DATA CAN BE INTEGRATED TO EXISTING SYSTEMS

Case: City of Lahti, Finland

CHILDREN'S' FOREST PROJECT

- 59 day care centers
- Natural areas/places used in early childhood education
- Routes to places
ONGOING RESEARCH

FREERIDE
Children’s independent & equal mobility and physical activity in a free public transport experiment in a city of Mikkeli (Finland)

- Objective activity measuring
- PPGIS surveys
- Etnografic research
How children have been taken into account in the city planning of Helsinki?

**1940-1950** Children were still moving around very freely, the institutionalization was in early stages, but traffic was growing fast and accident statistics were worrying. People were very concerned about the "idle" children of the streets.

**1960-1980** decades included the building of the suburbs, where the traffic safety and local services were good and supported the independent mobility of children. Suburban living became a norm for the dwelling of families and developing the childfriendliness of the city centre was not in the agenda.

*Photo: Saarinen, 1956, Museovirasto.*
PLANNING IDEALS DURING THIS ERA:
- Children’s independent mobility (and mobility with friends) highlighted
- The discussion concerning urban childhood was problem focused: as if the right place for a child is still in the countryside!
TWO DREAMS...

1. How environment supports the social wellbeing of children?
2. Child-friendly environment in the era of climate change?
Some publications related to the topic:


INDIVIDUAL WORK:

Write an essay about what you learned about urban experiences during the course. Did you learn something about your own urban experiences and behavior? You can freely concentrate to some, especially interesting aspects:

- Theoretically
- Thematically
- Empirically
- Finding links to planning and design
- Or: you may find your unique way to profile your individual work

The format of the final work is free. You can write a traditional essay but you can also use visualizations, images or make a blog, Podcast or video.

DEADLINE?
My suggestion: two weeks after the end of the course
GROUP WORK PRESENTATIONS

Create a Power Point (or other format) presentation

1. What were the clusters that you were working with?
2. What kind of analysis did you perform?
3. Are there links to the research literature?
4. The results: What did you find out?
5. How the results can be used in planning?
6. Are there suggestions that you can make?

TIME: 10 min/ group

The task:
1. GIS-analysis or visualization
2. "On site" analysis & additional data collection
3. Historical analysis of the sites
4. Qualitative analysis
5. Improvement suggestions based on the place experiences by people
NEXT TIME: FINAL MEETING!

The presentations will be between **12.15-14.00**

In the morning you will still have some time to:

- Practise your presentation
- Get feedback about it

I will be in the Zoom if you want to use this opportunity 😊