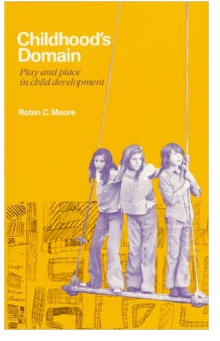
Your childhood experiences?

Child-Friendly Environment

Roger Hart (1979) Children's Experiences of Place

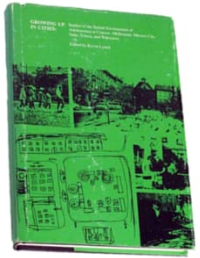
Classic studies about environmental childfriendliness

Robin Moore (1986) Childhood's Domain

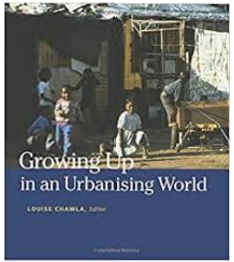


https://naturalearning.org/

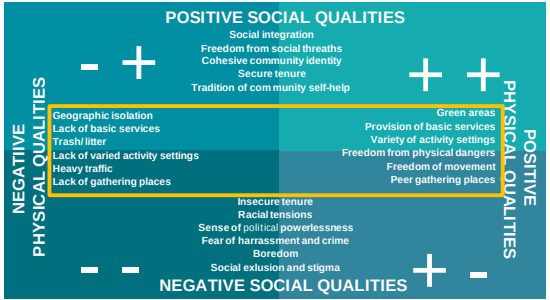
Indicators of environmental quality defined by children



Kevin Lynch 1977: Growing up in city



Chawla 2002: Growing up in an urbanising world



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)

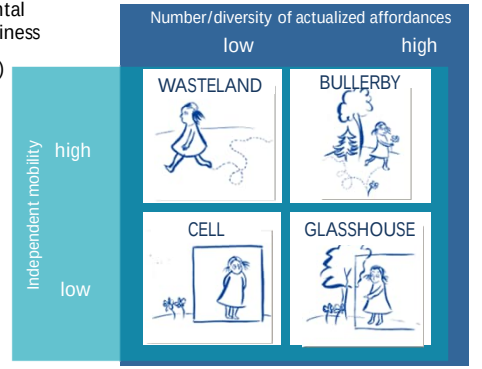
SOCIETAL

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

Fenced childhood?

Environmental childfriendliness

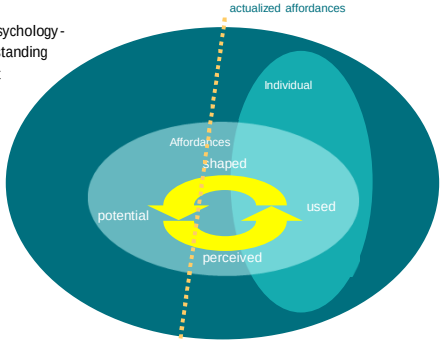
Kyttä (2003)



Affordance 'spectacles'

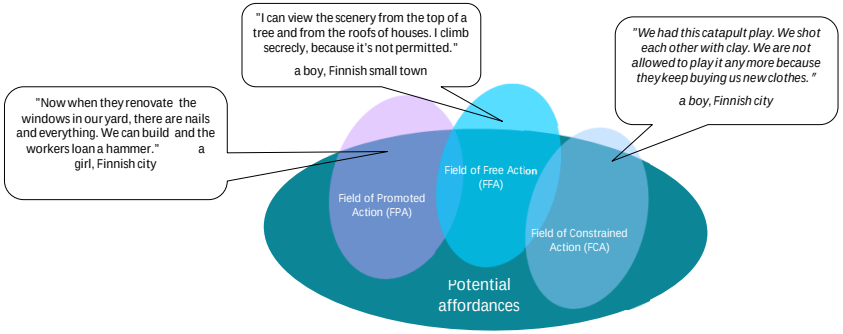
Theoretical background:

Gibson's ecological psychology - a nondualistic understanding of persons-in-context

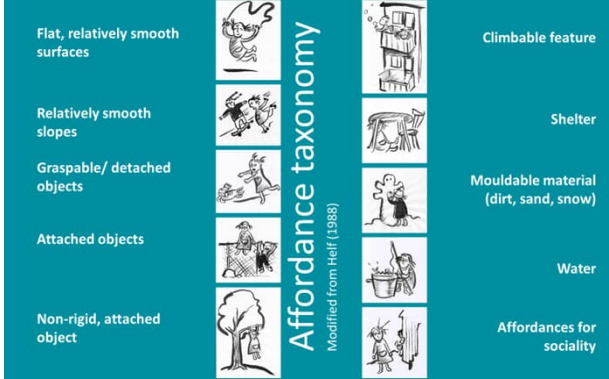


Affordances of urban environment

SOCIAL DIMENSIONS OF AFFORDANCES



Inspired by : Reed, E.S. (1993) The Intention to Use a Specific Affordance: A Conceptual Framework for Psychology. In Wozniak, R.H. & Fischer, K.W. (ed.) Development in Context. Acting and Thinking in Specific Environments. Hillsdale, New Jersey: Lawrence Erlbaum Associates.



WASTELAND	BULLERBY
CELL	CLASSHOUSE

BULLERBY

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

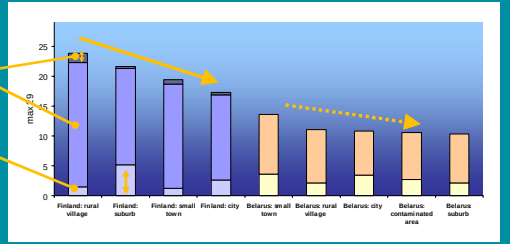
Duties as affordances

WASTELAND	BULLERBY
CELL	GLASSHOUSE

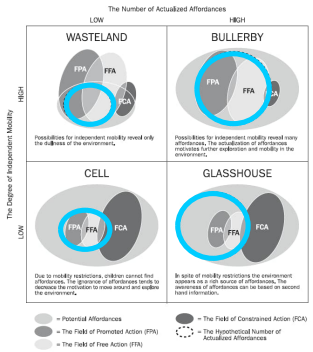
GLASSHOUSE

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.

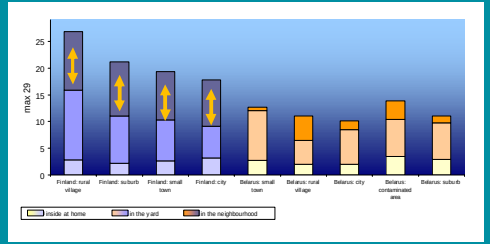
AVAILABILITY OF AFFORDANCES IN DIFFERENT COMMUNITIES

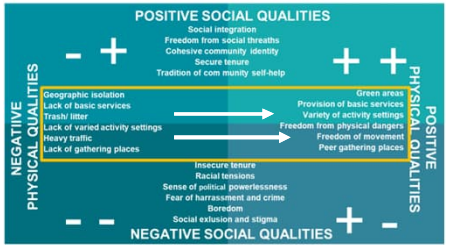


THE HYPOTHETICAL NUMBER OF ACTUALIZED AFFORDANCES IN EACH TYPE OF ENVIRONMENT

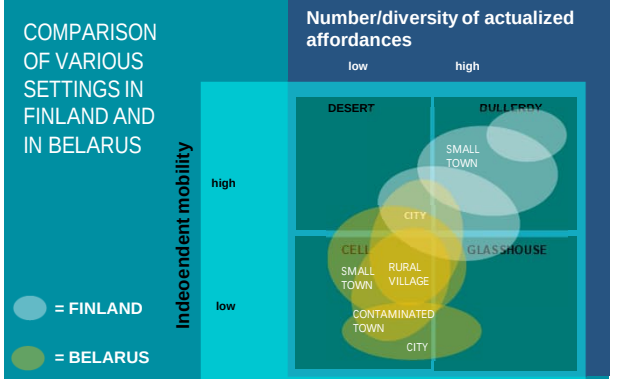


WHERE ARE THE AFFORDANCES LOCATED?

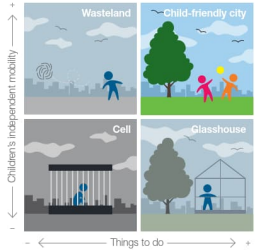




COMPARISON OF VARIOUS SETTINGS IN FINLAND AND IN BELARUS

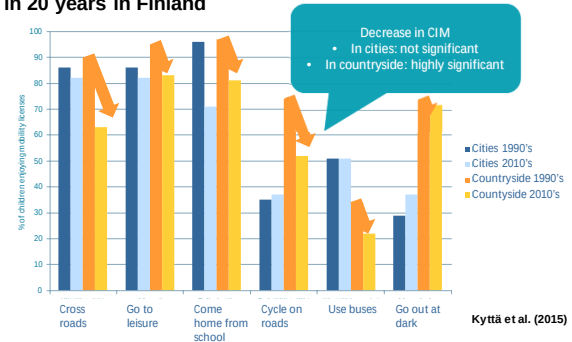


BULLERBY MODEL HAS BEEN USED TO ADVICE CHILD-FRIENDLY PLANNING AND DESIGN



2017 2021

The decrease of children's independent mobility in 20 years in Finland

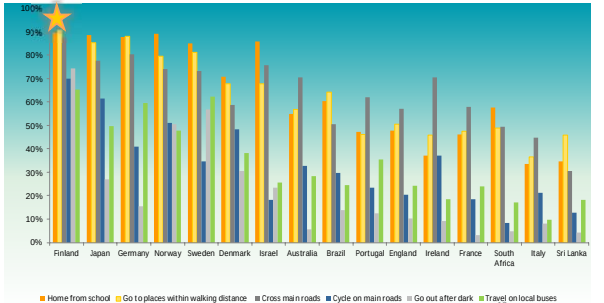


Kyttä et al. (2015)

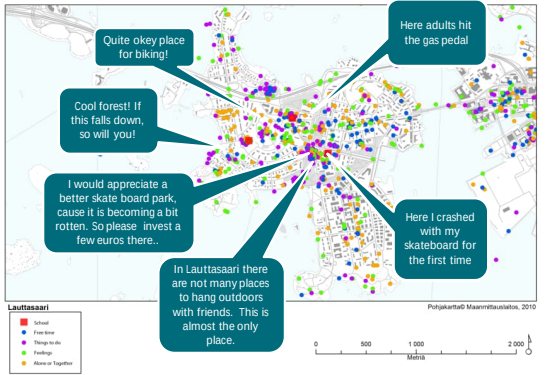
LATER:
CHILDREN'S INDEPENDENT MOBILITY IN 2010's

Children's independent mobility in 16 countries

Mobility licences given by parents (Shaw et al. 2015)

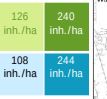


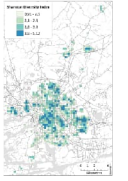
Context spesific knowledge from children

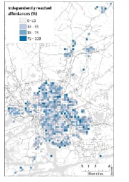


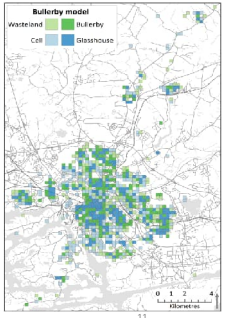
Place-based approach in child-environment studies

Environmental childfriendliness a la Bullerby model



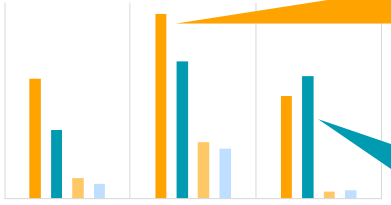






Contextual differences

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

Contextual differences

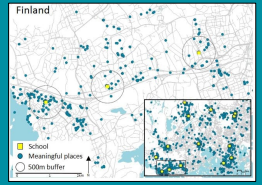
The location of meaningful outdoor places

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 settings

189

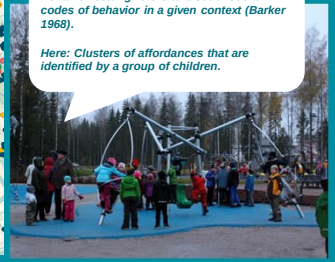
behavior settings in Helsinki and Tokyo

Here: a shopping centre in Helsinki

Behavior settings – clusters of affordances

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.



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

		Finland *n* (%)	Japan *n* (%)		Finland *n* (%)	Japan *n* (%)	e between the untries
Openness	Indoor	30.9%	34.2%	n.s.	94.4%	91.3%	n.s.
	Outdoor	57.3%	58.2%		89.3%	75.0%	$X^2 = 23.4$, $= 1$, $p = .000$
	Both	11.8%	7.6%		60.8%	78.9%	$X^2 = 16.5$, df = 1, $p = .000$
Communality	Shared	78.2%	83.5%	n.s.	92.0%	81.9%	$X^2 = 24.6$, df = 1, $p = .000$
	Child specific	21.8%	16.5%		65.9%	79.9%	$X^2 = 12.4$, df = 1, $p = .000$
Land use	Educational	22.9%	16.5%	$X^2 = 24.6$, df = 5, $p = .000$			
	Commercial	21.9%	26.6%				
	Recreational	27.6%	30.4%				
	Natural	22.9%	3.8%				
	Traffic	3.8%	15.2%				
	Religious	1.0%	7.6%				

Japan: Commercial, recreational, traffic and religious settings more common

Finland: Natural and educational settings more common

ONGOING NORDGREEN-STUDY IN CITY OF ESPOO

The Master's thesis of Ella Paasilinna

Children's home range

1661 respondents

Two age groups: 12 and 15 year-olds

Main results:

- Mean home range = 15 km²
- Still: over half of the activity places located less than 2 km distance from home
- Older children and girls had wider home ranges
- Majority of activity places located in built areas (n=9000; 88%); minority in green areas (n=1201; 11,7%)
- Very large (over 20 km²) home ranges associated with lower perceived health

PLACE-BASED DATA DROM CHILDREN CAN BE USED BY PLANNERS

CASE: CITY OF LAHTI,

To think about...

Thank you!

Selected publications:

Broberg, A. Salminen, S. & Kyttä, M. (2013) Physical environmental characteristics promoting independent and active transport to children's meaningful places. Applied Geography, Vol. 38, 43-52.

Broberg, A. Kyttä, M. & Fagerholm, N. (2013) Child-friendly Urban Structures: Bullerby Revisited. Journal of Environmental Psychology. Vol. 35, 110–120.

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Kyttä, M. Oliver, M. Ikeda, E. Ahmadi, E. Omiya, I. & Laatikainen, T. (2018) Children as urbanites: Mapping the affordances and behavior settings of urban environments for Finnish and Japanese children. *Children's Geographies*, Vol 16, No 3, 319–332.

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Shaw, B. Bicket, M. Elliott, B. Fagan-Watson, B. Mocca, E. & Hillman, M. (2015) Children's independent mobility. An International Comparison and Recommendations for Action. Policy Studies Institute, London.