



Department of Geosciences and Natural Resource Management

Children's velomobility – how cycling children are 'made' and sustained

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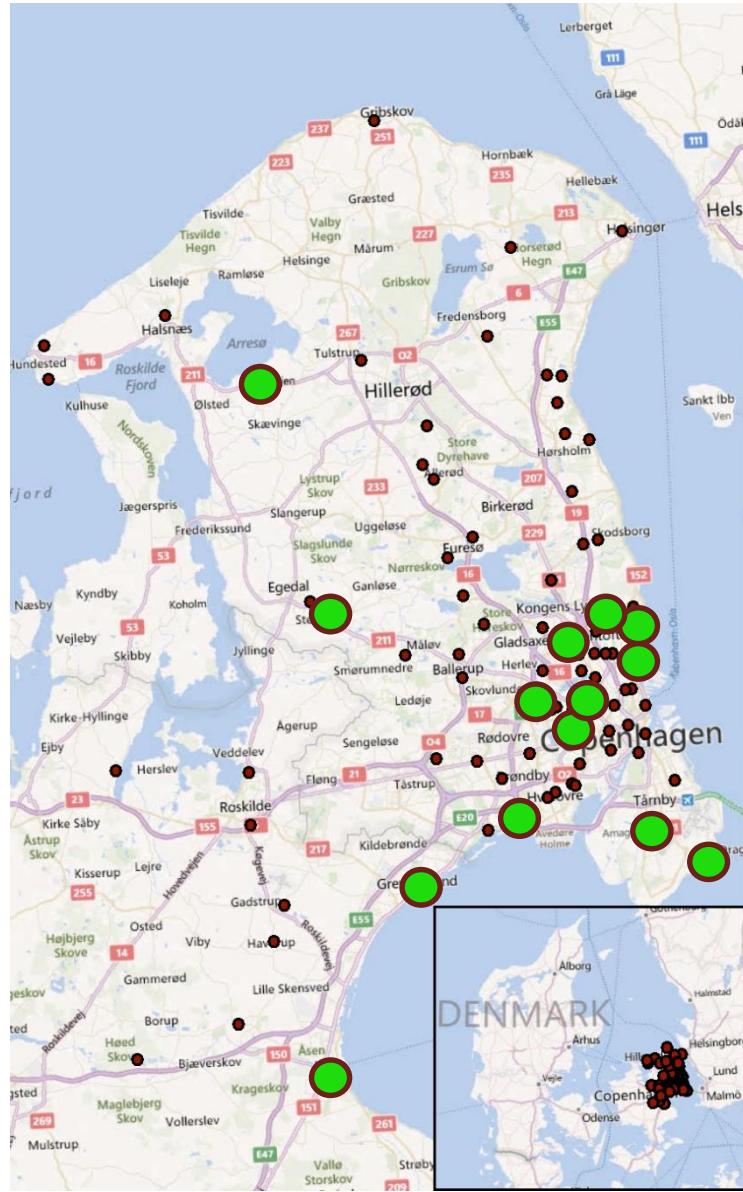
Trafikdage i Aalborg, Aalborg University, 25 Aug 2014



What is important for children's cycling?

- 1) How do children learn to cycle?
- 2) What does it take to become an independent cyclist?
- 3) Why do some children become independent cyclists in a young age?





Methodology

- Qualitative interviews (1-2 hs) with parents (N=17) of children aged 10-14 years (N=20)
- Metropolitan area of Copenhagen, selected from national survey, N=88 (2011)
- Local schools, short school trips, capable of cycling and overall view of traffic



Focus of interviews

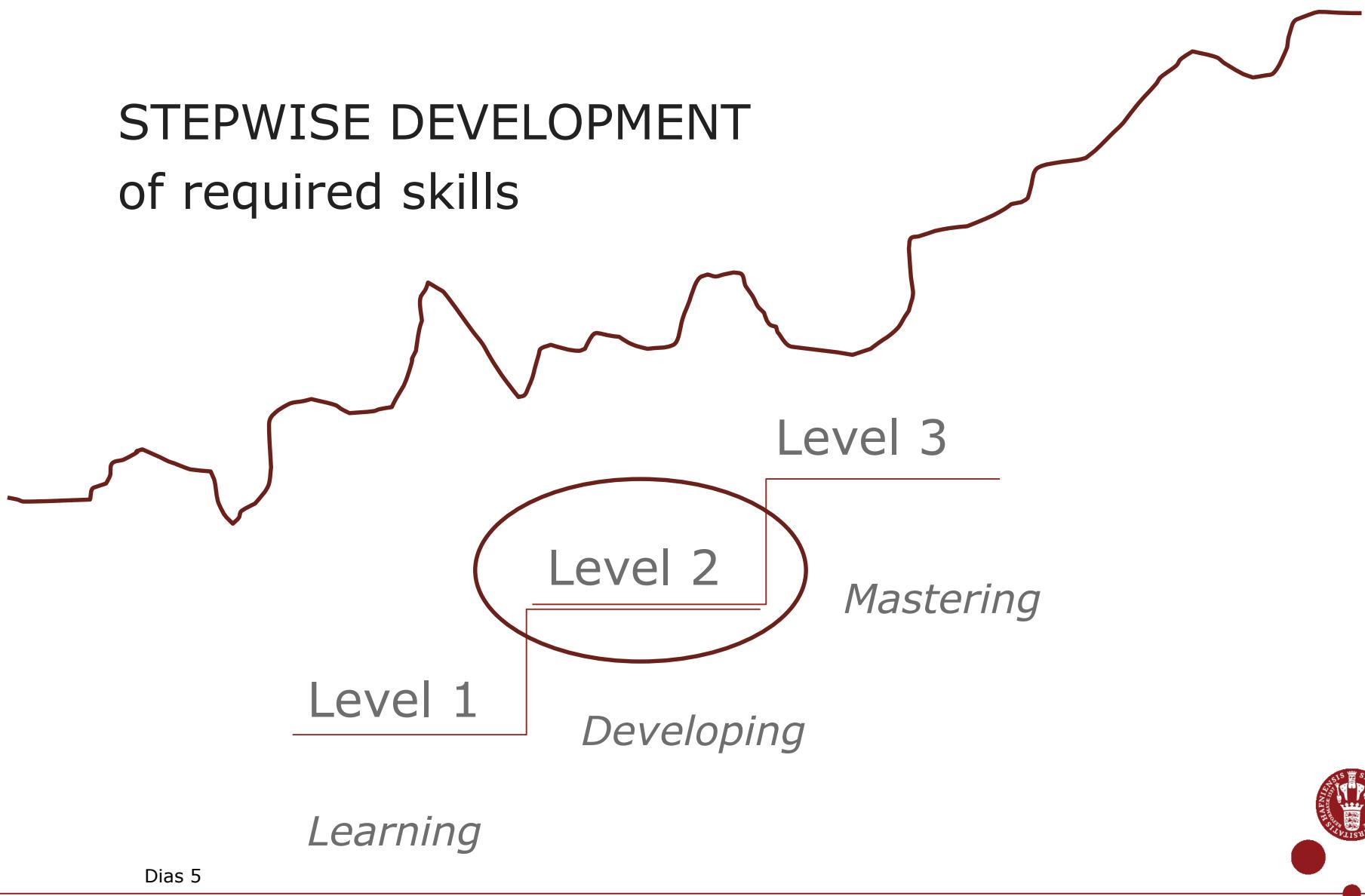
- Family's travel patterns
- how children's transport relates to parents' travel modes
- how children learn to cycle
- key aspects for enhancing children's cycling skills
- the bikeability of the local physical setting
- local social norms for transportation of children

- Field studies of school route
- Map drawing



1. How do children learn to cycle?

STEPWISE DEVELOPMENT
of required skills



2) What does it take to become an independent cyclist?

Training intensity

Critical for proceeding

School cycling important

- kindergarten, older siblings

Age of independent cycling varies

Level 3

11 -

Level 2

5 - 12

Level 1

3 - 6



3) Why do some children become independent cyclists in a young age?

Parents are key
Facilitate the learning
process

- Level 1 in family
- cycling capacity,
accumulating skills
- environmental understanding
formal traffic rules +
experience-based
knowledge about principles
for cyclists' conduct



”Er hun det mindste i tvivl, så er det hånden op og ind på fortovet...Vi har tit snakket om, at man ikke skal lade sig presse af, at skulle den ene vej, eller føle at man skal følge de andre. Hvis man er usikker, skal man markere at man stopper og så lige få [cyklen] ind på fortovet.”

Mor, datter 11 år



Environmental support

Parents' risk perception

The local environment's (perceived) supportiveness for cycling



- a) local physical environment
- b) local transport culture

1/2 sufficient support

1/2 varying degrees of support

No non-supportive environment



Parents' risk perception

1/2 varying degrees of supportiveness

They identify obstacles. Site specific dangerous spots

Ways to deal with perceived risks:

a) transgress the unsafetiness by training and preparing the child to handle the traffic challenges. Want/need cycling children.

b) limit child's action range, drive by car, delimit safe routes.

Post-pone the decision about when to let off their child as independent cyclist.



Preoccupied parents

Will cycling be a natural choice in youth?
Mobility patterns of childhood -> adult life.

Transport to post-secondary education

Cycling cultures' robustness at risk?
Not a self-evident process.
Need facilitation and support to proceed



Jeg cyklede altid, da jeg var ung. Og det var også derfor vi prøvede at sige til Victor i mange år, at man kommer så hurtigt omkring, fordi sådan har jeg selv haft det. Men han har jo ikke oplevet at vi har cyklet som voksne... Altså det der med altid at blive kørt i børnehave... Han har ikke fået det ind som en naturlig del af hans hverdag. ... Og så tror jeg også bare, han er meget mere magelig... Jeg ved ikke hvor meget hans venner egentlig cykler, for det kan jo også have betydning. Jeg kan huske at der var en periode, hvor de sagde at han var irriterende fordi han aldrig havde cykel med. Altså hvis de skulle noget efter skole, så stod han altid der uden cykel, og var altså den tunge jo ikk', der kom luntende meget senere.

Mor til sønner, 12 år + 16 år

Summary

Learning process.

Instable, fragile, not 'natural'

Level 3 cyclists become cyclists. Easy and 'natural' transport mode choice.

Parents are key. Facilitators, perception of local environments supportiveness.

Risk perception important.

– transgressing or limiting

-> some vulnerable children who might not become cyclists



Lessons from the study

Many supportive local environments and parents with low risk perception

Spatial planning promoting cycling is important.

- School cycling at feasible lengths

Campaigns (school patrols) targeting parents risk perception.

Calms parents' risk perception.

Makes cycling an easy option.

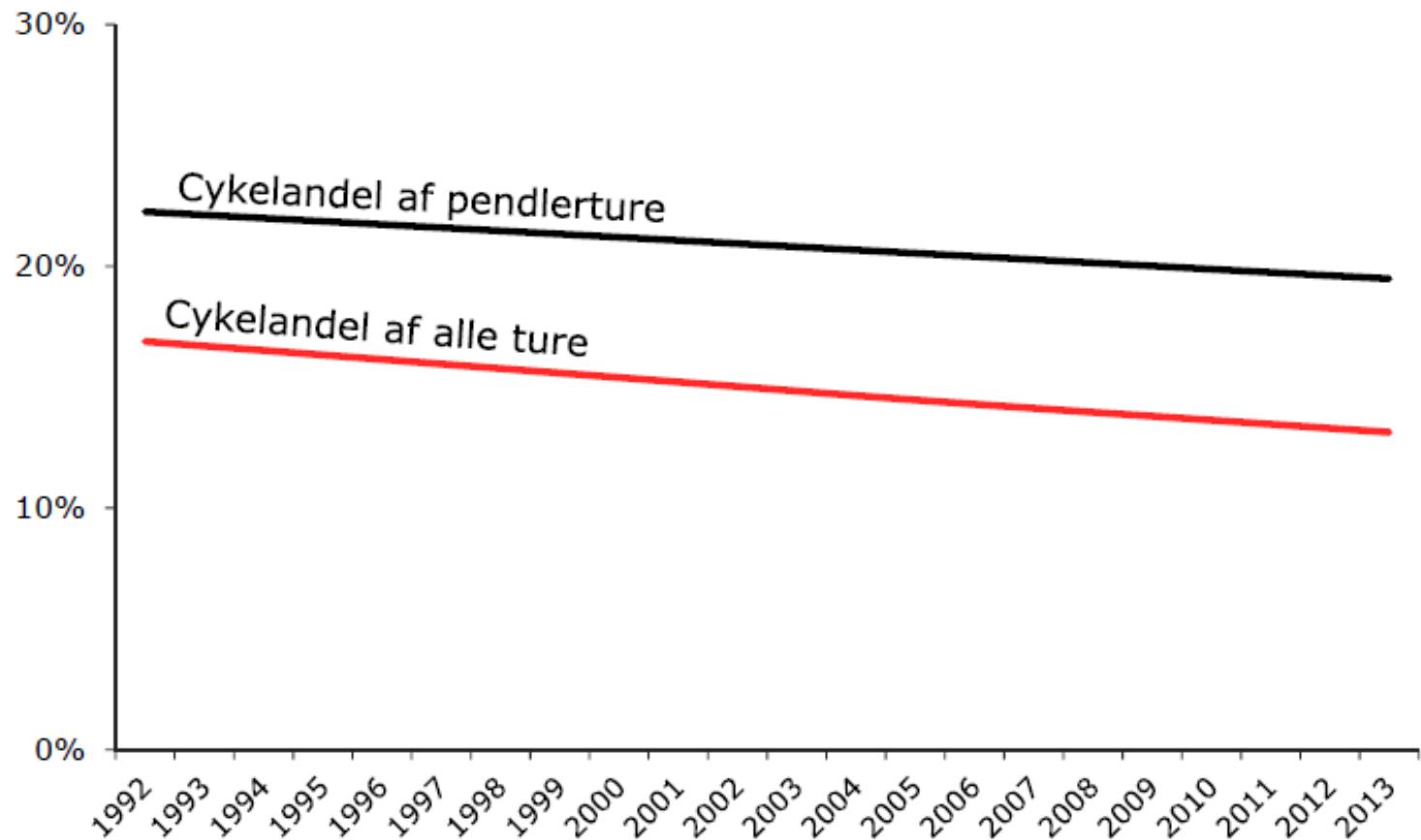
Transgressing perceived barriers

Other actors:

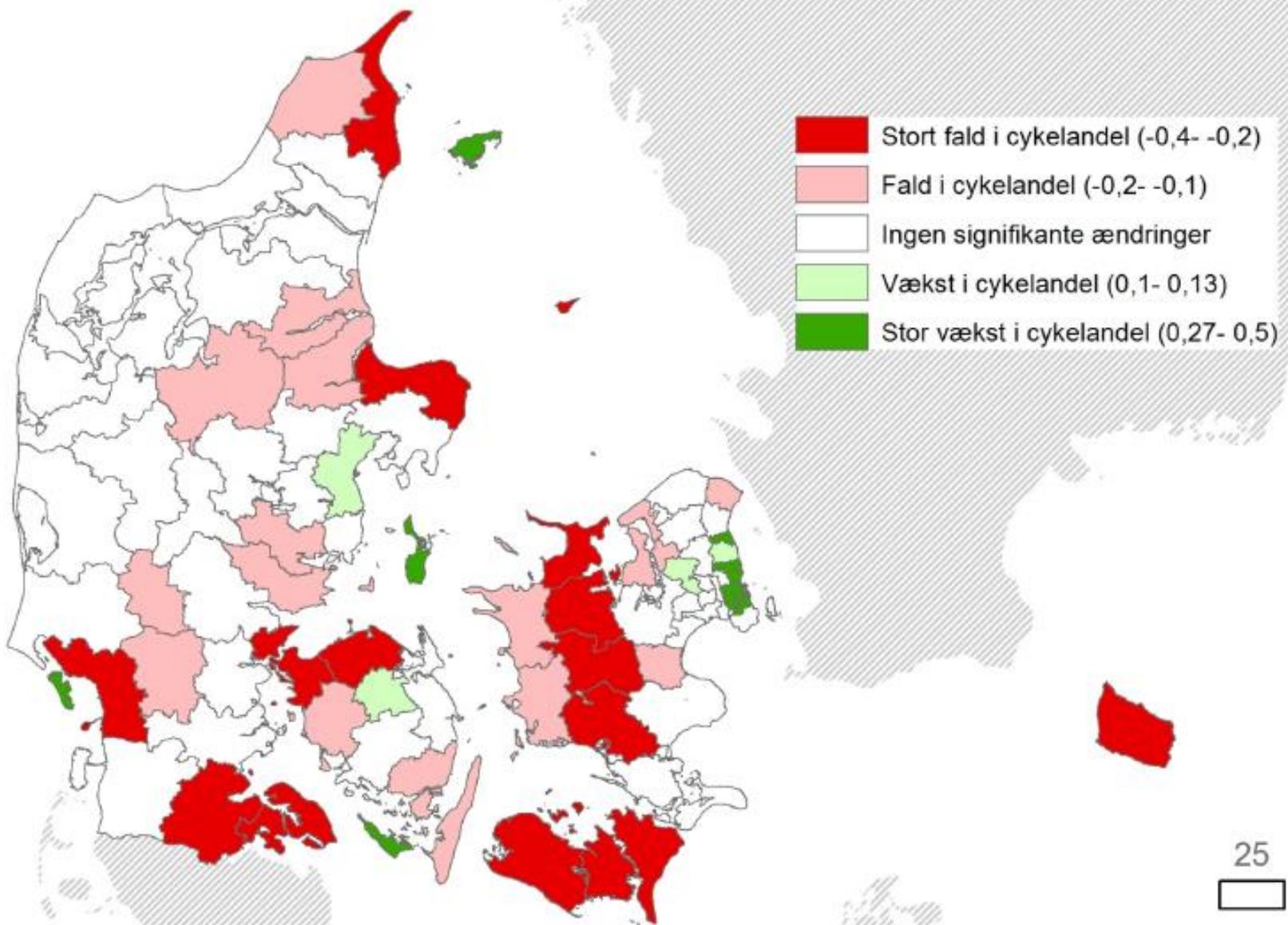
School, peers (parents) can facilitate (training) the accumulation of children's skills, and make it more plausible for the child to become a cyclist



Bicycle-use share of daily trips 1992-2003 – Danish adult population



Bicycle-use share of daily trips 1995-2013



25

Km



A photograph of a person riding a bicycle through a dense forest. The person is wearing a dark jacket and a helmet, and is riding a blue bicycle with a yellow basket. The forest consists of many tall, thin trees with green leaves. The person is moving from right to left across the frame.

THANK YOU for your attention