Creating healthy environments?
It’s child’s play

Paul Tranter
UNSW Canberra

NSW Health Promotion Symposium
15 and 16 November 2012
Creating healthy environments requires a fundamental cultural shift in lifestyles, speed and productivity.

We can appreciate the links between healthy environments and play if we look at children and cycling.
Child friendly cities and cycle friendly cities: remarkably similar
<table>
<thead>
<tr>
<th>Country</th>
<th>Cycle share of trips to school (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>49</td>
</tr>
<tr>
<td>Switzerland</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>14</td>
</tr>
<tr>
<td>Australia</td>
<td>4</td>
</tr>
<tr>
<td>UK</td>
<td>3</td>
</tr>
<tr>
<td>US</td>
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</table>

(McDonald, 2012)
Links between child friendly modes and children’s well-being

Transport Reviews, Vol. 28, No. 4, 495–528, July 2008

Making Cycling Irresistible: Lessons from The Netherlands, Denmark and Germany

JOHN PUCHER and RALPH BUEHLER
<table>
<thead>
<tr>
<th>Dimensions of child well-being</th>
<th>Dimension 1</th>
<th>Dimension 2</th>
<th>Dimension 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average ranking position (for all 6 dimensions)</td>
<td>Material well-being</td>
<td>Health and safety</td>
<td>Educational well-being</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4.2</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>7.2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Finland</td>
<td>7.5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>United States</td>
<td>18.0</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>18.2</td>
<td>18</td>
<td>12</td>
</tr>
</tbody>
</table>

OECD countries with insufficient data to be included in the overview: Australia, Iceland, the Slovak Republic, South Korea, Turkey.
Figure 1. Bicycle share of trips in Europe, North America and Australia (percentage of total trips by bicycle).

Sources: European Union (2003); German Federal Ministry of Transport (2003); U.S. Department of Transportation (2003); European Conference of the Ministers of Transport (2004); Department for Transport (2005); Organisation for Economic Cooperation and Development (2005); Netherlands Ministry of Transport (2006); Australian Bureau of Statistics (2007)

## Dimensions of child well-being

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</tr>
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</table>

![Bar chart showing percentage of child well-being over years for Sweden, Finland, Denmark, and Netherlands.](chart.png)

- **Swedish percentage:** 18%
- ** Finnish percentage:** 27%
- ** Danish percentage:** 11%
- ** Dutch percentage:** 10%
Child friendly cities:

United Nations Convention on the Rights of the Child
Provision
(survival and development)

Protection

Participation
Provision rights

Water: A Precious Resource:  Photo by niOS
http://www.flickr.com/photos/nios/3376170604/
The right to play, which is clearly articulated in Article 31 of the UN CRC.

Article 31 is sometimes seen as an optional component of children’s lives; yet this article is based on the recognition that play is fundamental to children’s development: physical, social, intellectual and emotional.

Children play anywhere and everywhere, not just in purpose built play spaces.

Photo by Maya Spitz
Freedom to playfully explore their environment

Children and Shadows: Photo by Abe K
http://www.flickr.com/photos/abekleinfeld/5378999934/
Protection rights

Banksy Tunpike Lane London: Photo by Deptford Jon
http://www.flickr.com/photos/deptfordjon/7205314352/
Protection rights
Protection rights

“Children today walk less than ever before in the history of humanity”

(Roberts and Edwards, 2010, 39)
Participation rights

Children as present citizens, not just future citizens
Participation rights

Participating in planning and decision making

http://evstudio.wordpress.com/2009/04/
Participation rights

Participating in community life
If we promote these rights for children, we’ll also have healthier cities for everyone.
Parallels between cycle-friendly cities and child friendly cities

The perspective of the rights of the child
Provision rights

Play - mastering a risky, challenging activity

A full second on two wheels by By Glenn Loos-Austin
http://www.flickr.com/photos/junkchest/154558081/
Provision rights

Playfully explore their city

Boys just wanna have fun by Tomorrow Never Knows
http://www.flickr.com/photos/47803993@N08/5326169125/
Provision rights

Extension of play territory

Childhood by Extra Medium
http://www.flickr.com/photos/johnmueller/530205359/
Provision rights

Social Play

Photo by Greg Robbins
http://www.flickr.com/photos/282521369/
Protection rights

Protection from traffic danger

Izumi Park Town, Sendai, Japan. By Design for Health
http://www.flickr.com/photos/designforhealth/6784351226/
Protection rights
Protection from stranger danger

http://www.flickr.com/photos/kayveeinc/3604623397/
Protection rights

Reduced lifestyle diseases

Leading by example
Photo by Planetgordon.com
http://www.flickr.com/photos/planetgordon/6202425306/
Participation rights

When we prioritise cycling, we help make children visible and connected

Training Wheels down Park Ave and Midtown Photo by Dan Nguyen @ New York City
http://www.flickr.com/photos/zokuga/6040377393
Participation rights

Connection to people and place

DSC08576 Photo by echoforsberg
www.flickr.com/photos/echoforsberg/2458983806
Why should the broader community care about child friendly cities?

Child friendly cities = healthy and resilient cities
The child friendly transport modes are the modes that make cities resilient and healthy. They use less energy and create less pollution, promote local communities, are less costly, and save us valuable space and time.
Cities where child friendly modes are dominant, spend less time travelling per day than in cities where cars are the main mode of transport.
Travel Time Budgets (TTBs)

- **Western European Cities**
  - TTBs (mins): 43
  - Distance Travelled (km): 21

- **North American Cities**
  - TTBs (mins): 55
  - Distance Travelled (km): 40

Source: Joly (2004)
The increased speed is not used to save time but to cover more distance

Increases in speed do not fully compensate for the increasing distances

Car dominated cities pay for their speed with longer travel times
This is not counting the extra time we need to earn the money to pay for all the costs of cars
The Speed Paradox

Effective speed:

The average speed of a vehicle after hidden time costs are considered

(Tranter, 2012)
“The typical American male devotes more than 1,600 hours a year to his car … He spends four of his sixteen waking hours on the road or gathering his resources for it”

(Ilich, 1974, 18-19)
“The model American puts in 1,600 hours to get 7,500 miles: less than five miles per hour”

(Illlich, 1974, 19)
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Effective Speed: Cycling Because It’s “Faster”

Paul Tranter
Some estimates of effective speed for car drivers

<table>
<thead>
<tr>
<th>City</th>
<th>Speed (km/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto</td>
<td>12.9</td>
</tr>
<tr>
<td>Melbourne</td>
<td>11.3</td>
</tr>
<tr>
<td>Sydney</td>
<td>10.9</td>
</tr>
<tr>
<td>Tokyo</td>
<td>11.7</td>
</tr>
<tr>
<td>New York</td>
<td>8.6</td>
</tr>
<tr>
<td>London</td>
<td>6.6</td>
</tr>
<tr>
<td>Delhi</td>
<td>4.9</td>
</tr>
<tr>
<td>Nairobi</td>
<td>2.2</td>
</tr>
</tbody>
</table>
How can walking or cycling to school reduce time pressure?
Compare two scenarios

A households “save time” by driving their children to school and to other activities (e.g. sport), and every household has two or more cars.

B children walk or cycle to school, and most households have no car or only one car.
Scenario A - where households “save time” with their cars

– parents spend enormous amount of time at work earning the money to pay for the car that might save them 30 minutes a day on the journey to school.

[Image: Working late by alanceaver_2000]
Scenario A - where households “save time” with their cars

– because children don’t get exercise walking or cycling to school, parents drive them to sport
Scenario A - where households “save time” with their cars

– because of safety concerns, and because their children don’t know other children in the local area, they have to be driven to their friends’ houses
Scenario A - where households “save time” with their cars

– parents expose their children to higher levels of pollution, including in-car pollution
Scenario A - where households “save time” with their cars

- when their children are older they are more likely to be “fatter, sicker and sadder”
The collective impact of “saving time” with their cars?
Several hours per week driving children around
Scenario B - Where most children walk or cycle to school

Children:

• get to know local friends
Scenario B - Where most children walk or cycle to school

Children:

• feel a part of the local community
Scenario B - Where most children walk or cycle to school

Children:

• are fitter, happier and healthier
Scenario B - Where most children walk or cycle to school

Children:

• don’t have as much need to be driven to sport
Scenario B - Where most children walk or cycle to school

Parents:

- get to work by public transport, walking or cycling
Scenario B - Where most children walk or cycle to school

Parents:

- use their cars only rarely
Scenario B - Where most children walk or cycle to school

Parents:

• save time by not having to work as long to support the second car
Scenario B - Where most children walk or cycle to school

Parents:

- don’t need to drive their children to other places (sport, their friends) as often
Walking and cycling to school saves us time
Strategies for making environments more child-friendly and healthier
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Children and Cycling

Noreen C. McDonald
Changes to the built environment

Changes in social values
Changes to built environment

Schools, shops and services closer to children’s homes
Changes to built environment

Increasing children’s safety from traffic
Changes to built environment

Increasing children’s safety from traffic

Graz (Austria)
Changes to built environment

Secure cycle parking
Changes in social values

1. Slowness
2. Think and act collectively
3. Challenge risk-aversion
THE INTERNATIONAL BESTSELLER

in praise of

SLOW

HOW A WORLDWIDE MOVEMENT IS CHALLENGING THE CULT OF SPEED

CARL HONORÉ
“Children are not born obsessed with speed and productivity – we make them that way”
(Honoré, 2004, 216 – 217)
Think and act collectively

Recognise the collective impacts of individual decisions

Collective agreement to look after everyone’s children

bike to school day By carfreedays
http://www.flickr.com/photos/81325557@N00/3535548110/
Challenge risk aversion
The Sydney Playground Project started in 2009, but the idea itself is older. In 2003 and 2004, Professor Anita Bundy gathered a number of people with interest and expertise in children's health. Their common denominator was the belief that play should be an integral part of children's daily occupation and that play is beneficial in many different ways.

Many children in Australia are overweight, bullied or have poor mental health – problems that are often inter-related. One reason for these problems is that the amount of outdoor play has decreased in recent years. Outdoor play encourages social interaction and physical activity; indoor play is often sedentary and solitary. Play involves physical activity, creativity and cooperation, all of which will help children develop and maintain good physical and mental health. Best of all: most young children love outdoor play and will therefore pursue it.

In 2005, a pilot study was performed at one primary school in Western Sydney using “near-miss funds” from the University. The results were promising, so the research team started to apply for grants to investigate in a larger study.

In 2009, the team was granted funds from both the two major Australian funding bodies: NHMRC and ARC for three years. Our happiness was great - the “real” study could start!

In March 2009 we started extending the project team, recruiting schools, training students and sourcing test devices. In July 2009, after some very intense months of hard work, we started the first round of pre-testing with shaky legs! Fast forward to 2011 and we have collected data in twelve schools and are in the process of analysing the data.

http://sydney.edu.au/health_sciences/sydney_playground_project/
Physical activity and teamwork: one boy dragging four other boys who are holding onto a bread crate

Creativity, physical activity and teamwork: boys working together to build a fort-type structure

Teamwork, cooperation and physical activity: kids walking behind one another in a line

Physical activity and teamwork: a few kids building a structure from milk crates

Creative play: girls playing in the structure they have built using various materials

Physical activity and teamwork: two girls towing two other kids on a bread crate and rope trailer

Allowing children to take risks in play

Physical activity: children pushing a barrel with another child inside
Creating healthy environments

Requires a fundamental cultural change

revive innate values that already exist within our children

By taking the time to observe children’s play, we may re-discover:
The joys of slowness

The value of community and working together

The excitement of risk
Creating healthy environments?
It’s child’s play.

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Australia
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