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NON-MOTORIZED TRANSPORT: WALKING AND CYCLING IN ALL CLIMATES AND ENVIRONMENTS

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WALKING AND CYCLING IN ALL CLIMATES AND ENVIRONMENTS

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BIKING



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I POLITICS: PHILOSOPHY OF CYCLING

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“Thinking is impossible when driving on a city motorway”

“Walking is on a high pedestal as a mode of thinking and spiritual life”

“The most important ideas and decisions have been born when my feet have been on the ground or on the pedals”



Thinking cyclists at the Wanhat Welot konferens Tampere 2012

POLITICS: THOUGHTS OF FINNISH GOVERNMENT

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Prime Minister:
"Now we need to invest in roads, so that they would be in good condition when the wheels of economy begin rotating again..."

Philosopher
Georg Henrik von Wright:
"Technology will eventually lead into trouble, it should be diminished the human scale..."

"Private cars turn into a genuine plight of the human race and an obstacle to mobility in the modern, rapidly urbanizing society."



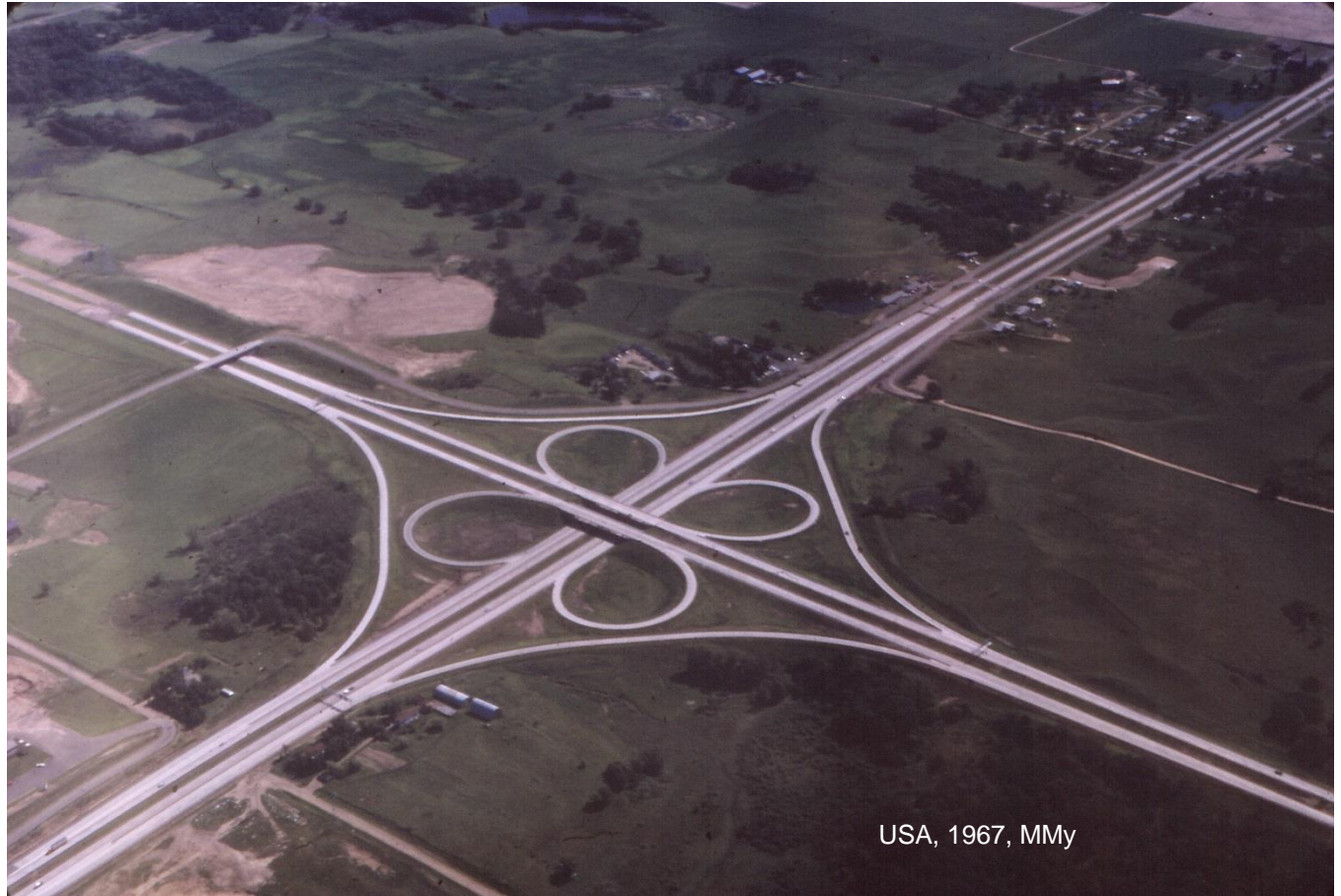
Pedestrians and bikers have their own connections across Oulu river 2015

POLITICS: ROAD AND THE CITY ARE ONE

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**Here's the road,
where's the city?**

Social capital is the starting point of the city! We must create possibilities for walking and cycling.

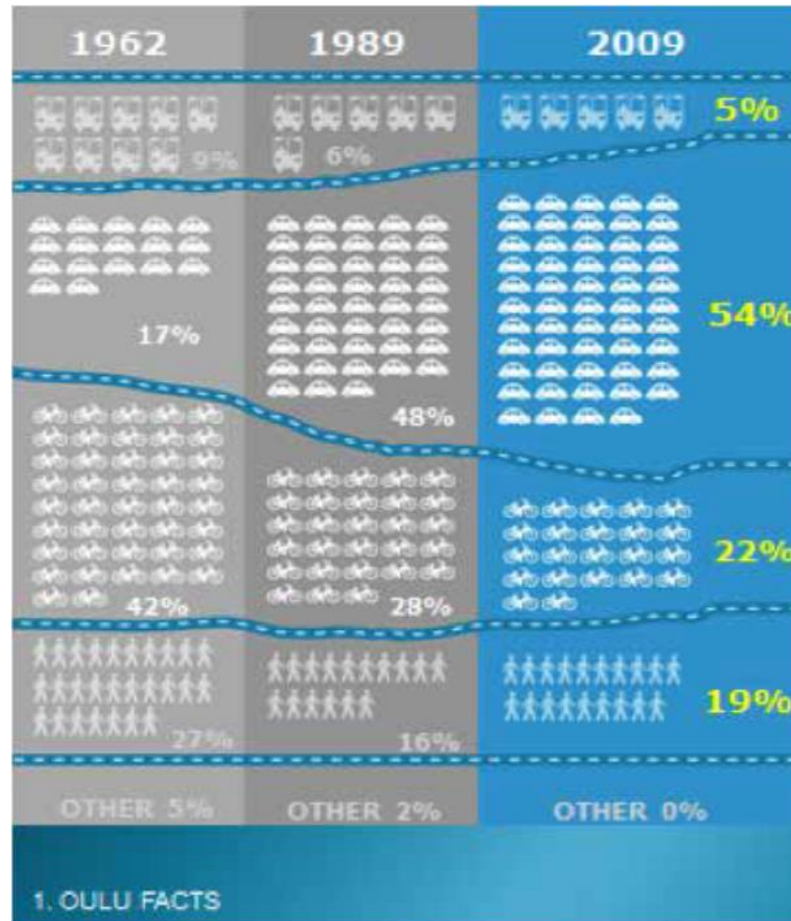


USA, 1967, MMy

POLITICS: ROAD AND THE CITY ARE ONE

Better walking and cycling conditions mean

- more social contacts
- better environment and community image
- energy saving
- increased wellbeing for people in the city



MODAL SPLIT DEVELOPMENT

- Public transport in decline
- Share of private cars still keeps on growing
- Some increase in walking

Modal split development on Oulu area / Ref. 21

II TACIT KNOWLEDGE

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Who would you call first, if you got this responsibility, is a classic question

I would call a zoning planner first and traffic officials next. But that would not be enough...



III GOOD CITY: SIGNS OF GOOD CITY

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Community and its transport system have a dependency ratio in our minds as well as in reality



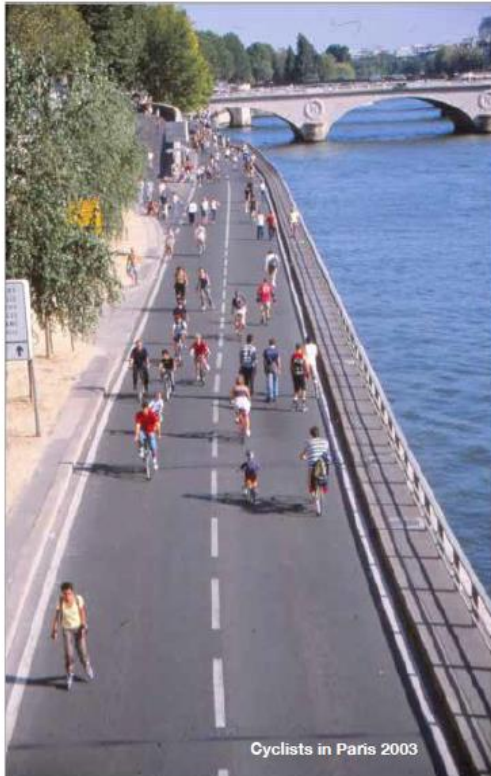
PART THREE

**ELEMENTS
AND VIEWS OF
A GOOD CITY**

GOOD CITY: SIGNS OF GOOD CITY

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GOOD CITY



According to Oulu University Professor of Urban Planning **Hentilä** the preferable features of a good cycling environment are:

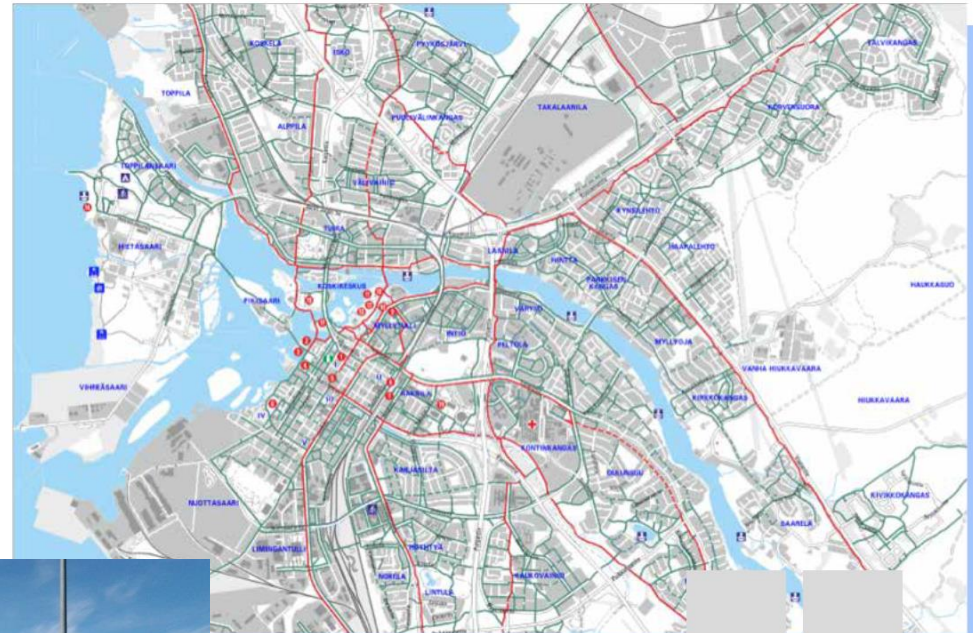
- 1. The city has a historical perspective**
- 2. Nature is present**
- 3. Building stock varies uniformly**
- 4. Maintenance is well arranged**

The Oulu region is one of the most successful cities in Finland. The traffic system has been part of lifting its image and rating. In a study that compared the image of Finland's cities the transport circumstances boosted Oulu. Oulu University also benefited in the comparison between schools because of the walking and cycling possibilities.

GOOD CITY: SIGNS OF GOOD CITY

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Biking network in city of Oulu



**Community and its transport system
have a dependency ratio
in our minds as well as
in reality**

Pedestrians and bikers have their own
connections across Oulu river 2015

GOOD CITY: SIGNS OF GOOD CITY

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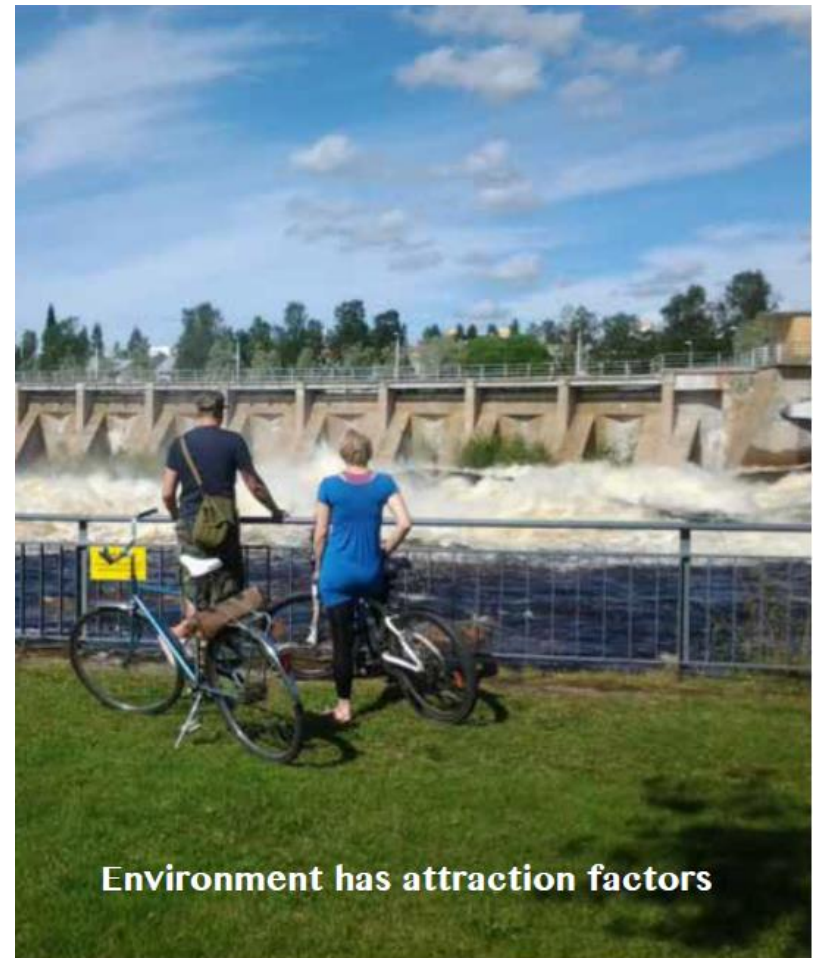
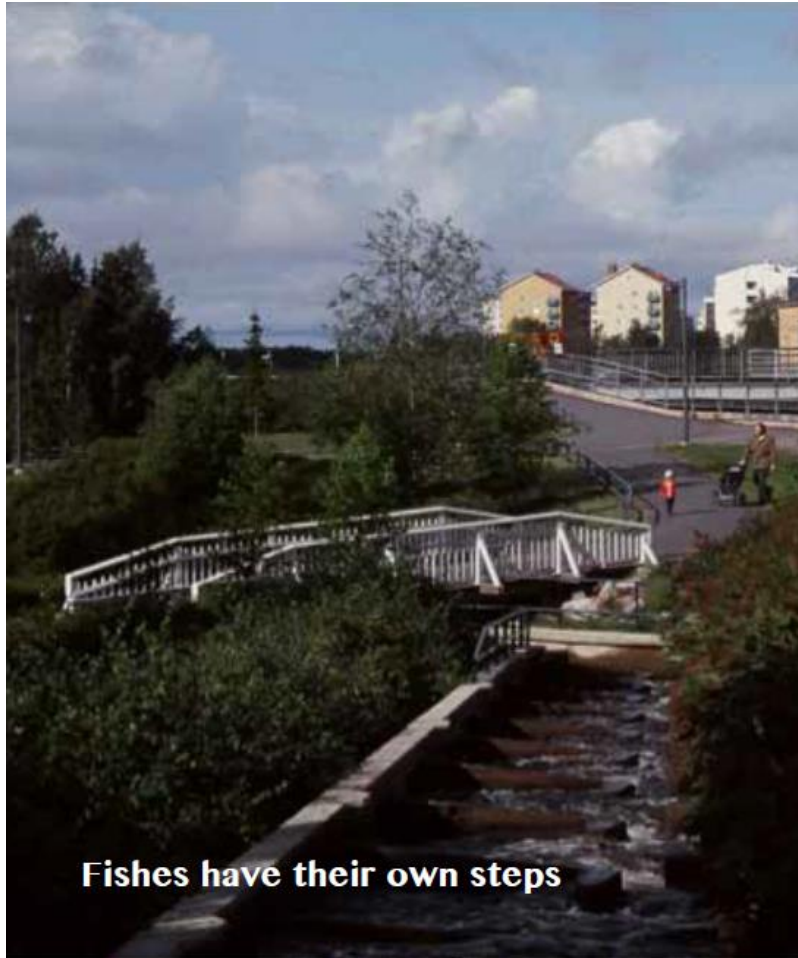
People are living within a cycling distance



Elegant streets can be seen

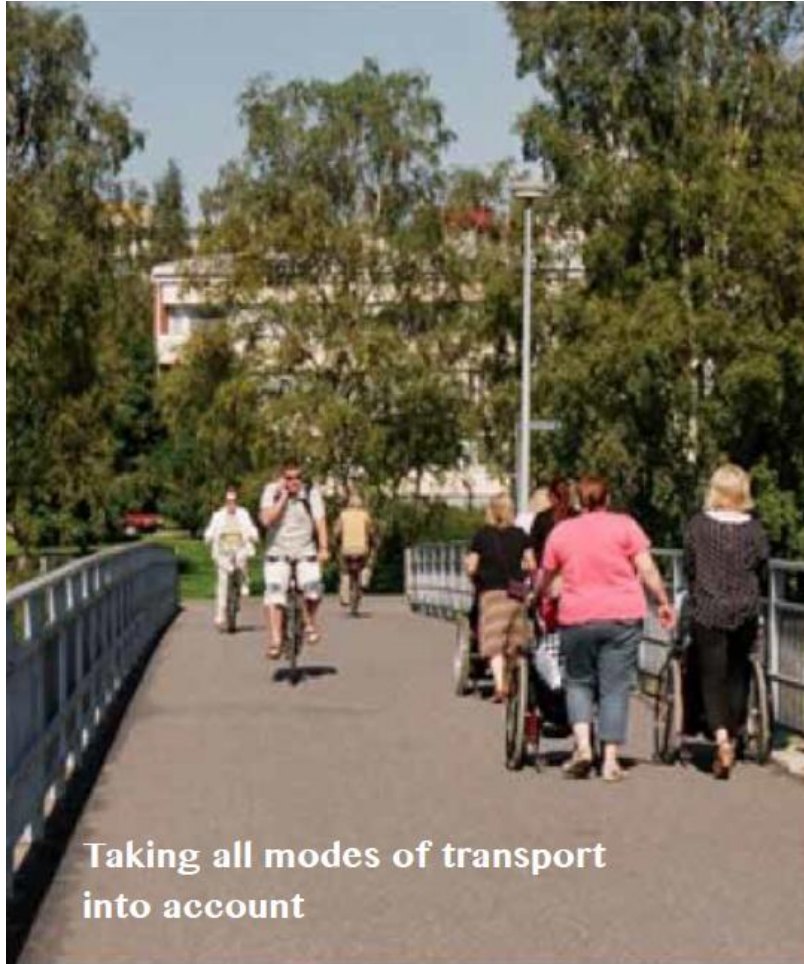
GOOD CITY: SIGNS OF GOOD CITY

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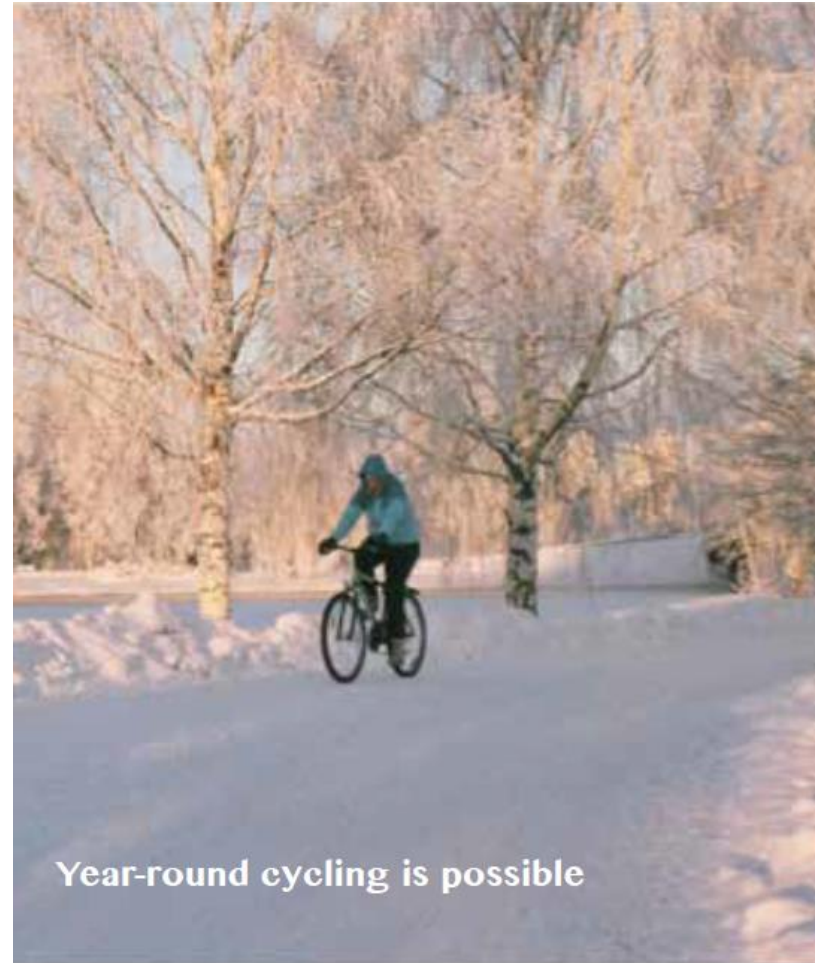


GOOD CITY: SIGNS OF GOOD CITY

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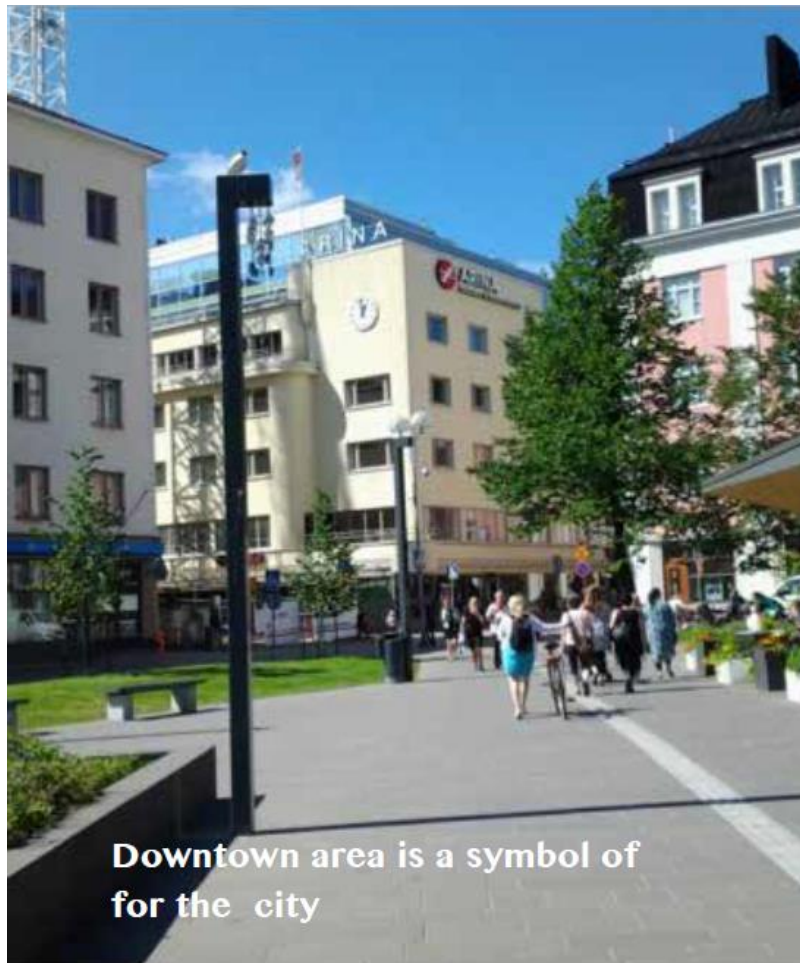
**Taking all modes of transport
into account**



Year-round cycling is possible

GOOD CITY: SIGNS OF GOOD CITY

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GOOD CITY: SIGNS OF GOOD CITY

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IV INFLUENCING: CREATING POSSIBILITIES FOR WALKING AND CYCLING

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The public sector:

The municipal role is important in organizing pedestrian and cycling traffic

The state has been a latecomer for responsibility for this mode of transport



IV INFLUENCING: CREATING POSSIBILITIES FOR WALKING AND CYCLING

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Transport issues have traditionally been treated by municipal **technical bureaus**

Key persons in good positions to promote the issue and have impact on decision-making process are needed



Odense Denmark 1986. There could find still much to learn for biking planners.

INFLUENCING: IMPORTANCE OF KEY PEOPLE

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The most influential people in promoting non-motorized traffic are the people drafting and presenting the plans

And that they are available to the consultants

A good employee comes to work, stays at work, and completes



Left: Greg Pates USA, Minnesota, Minnesota Department of Transportation (Mn/DOT)



Mentors and experts are in the same office: The city planners and the consultants.

They also organized the world's first Winter Cycling Congress in Oulu in 2013. The next congress was in Montreal in 2017

INFLUENCING: VIEWS AND VISIONS IN PROMOTING WALKING AND CYCLING

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Vision is a picture of common future achieved together

...

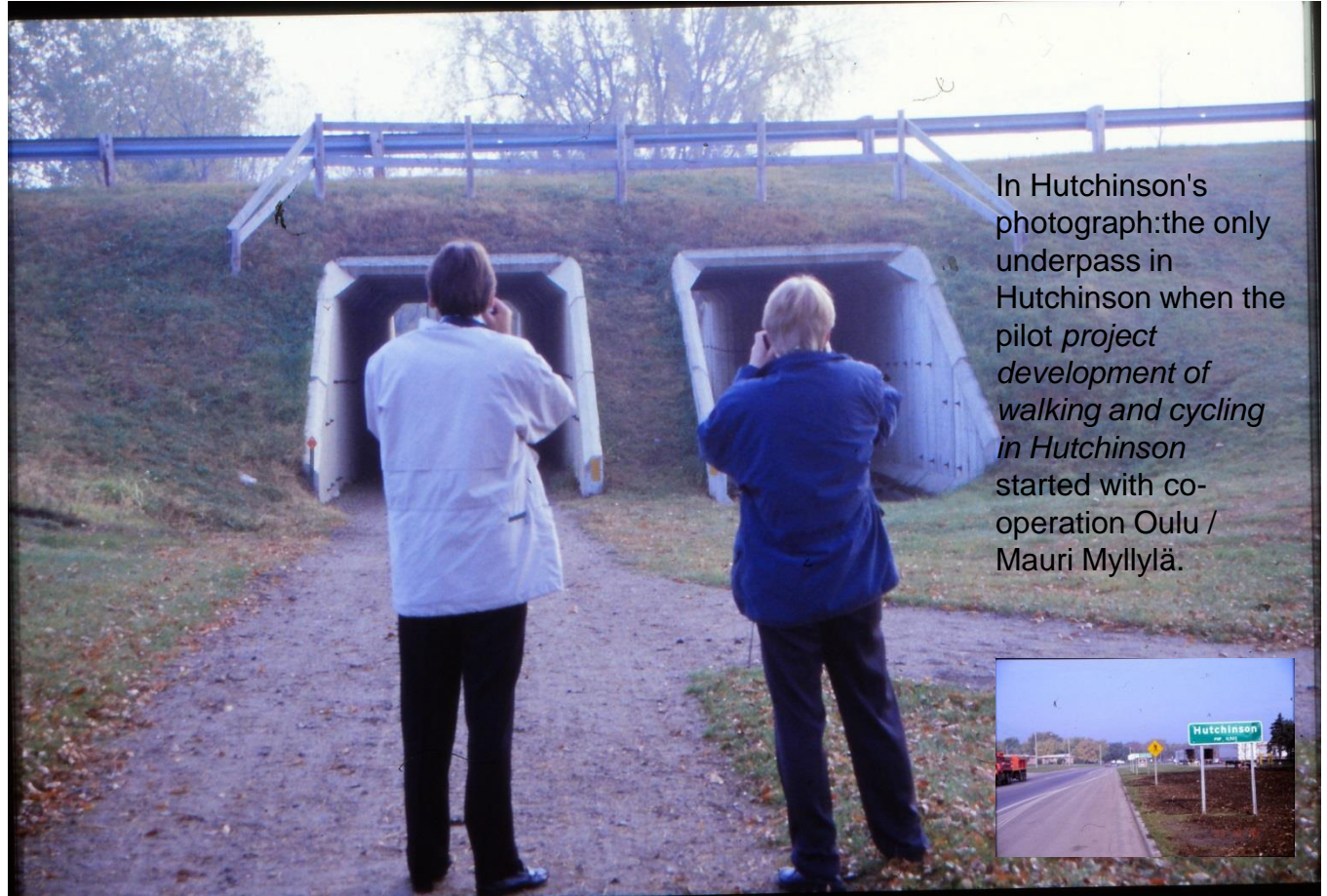
Vision is an important part of the strategy, which must be made to work as a whole.



INFLUENCING: EMERGENCE OF ONE'S OWN VIEW

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A view is a strong internal power that cannot be pushed aside.



In Hutchinson's photograph: the only underpass in Hutchinson when the pilot *project* development of walking and cycling in Hutchinson started with co-operation Oulu / Mauri Myllylä.



INFLUENCING: CREATING A VIEW IN OTHERS

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The tax authorities believe that taking the bus is the cheapest way to go to work for most people

Is this the truth?



INFLUENCING: OBSTACLES IN FORMING A VIEW AND PRESERVING IT

22

The first milestones for Oulu's pedestrian and cycling path network in the 1970's were reached at the same time as the construction of new parts of the city began.



V OULU'S CYCLING NETWORK: DESIGN PRINCIPLES

23

“Preparing for the growth of car traffic in the beginning of my career was trendy and at the same time gave birth counter-reactions.”

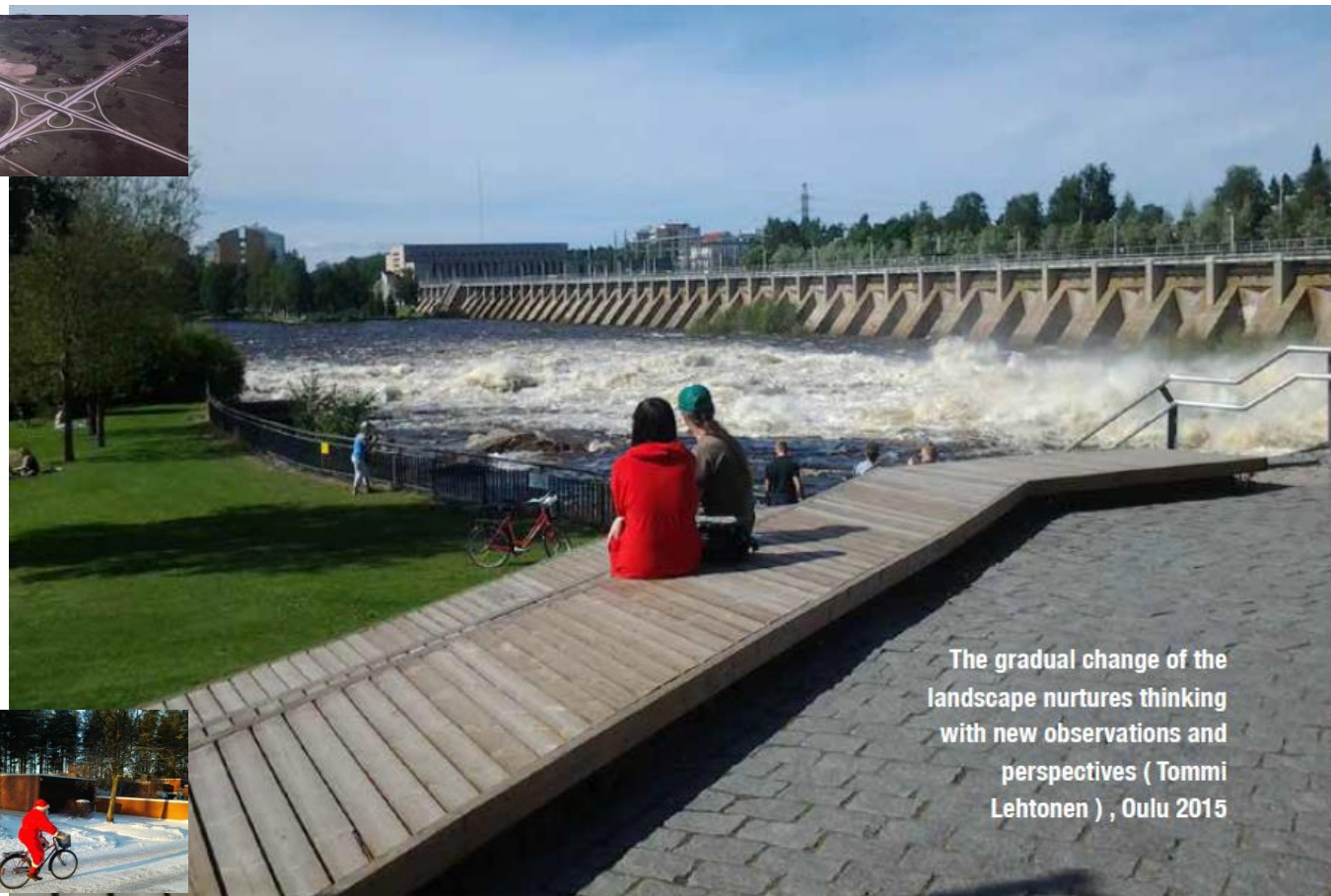


OULU'S CYCLING NETWORK: DESIGN PRINCIPLES

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The Consultant who drew up Oulu's first long term (car) traffic plan in 1967 - **opened the eyes** of the city council to recognize that walking and cycling were equal with other modes of transport

Oulu's first pedestrian and bicycle traffic engineering plan was completed in 1972.

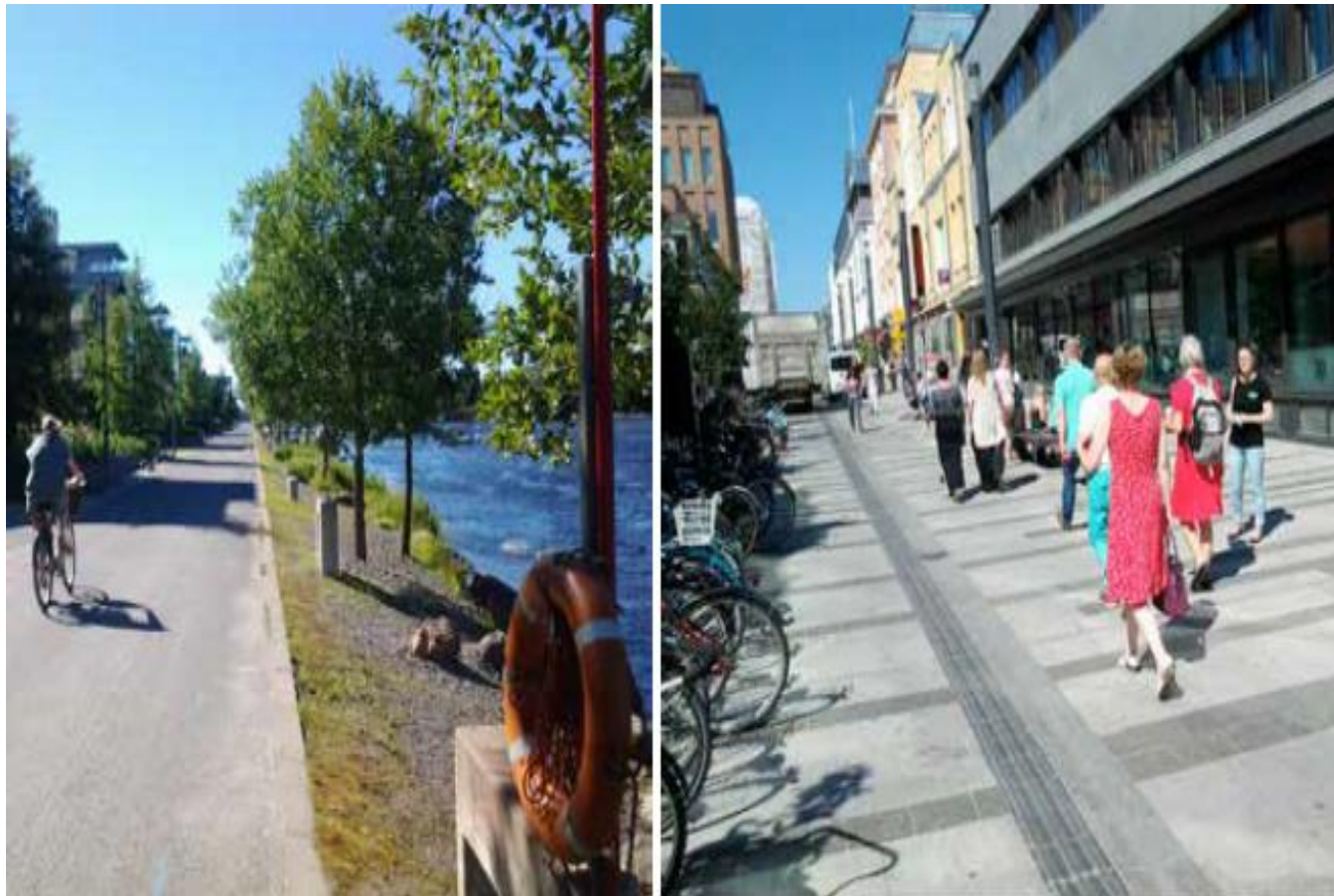


The gradual change of the landscape nurtures thinking with new observations and perspectives (Tommi Lehtonen) , Oulu 2015

OULU'S CYCLING NETWORK: DESIGN PRINCIPLES

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Municipal policies had no significant links to transport planning. Other planners pushed engineers to take up the task of non-motorized traffic



The design has avoided to locate main cycle paths in the vicinity of car traffic. The principle has been met with scepticism. The pedestrian centre concept was seen a generally applicable planning innovation.

OULU'S CYCLING NETWORK: DESIGN PRINCIPLES

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Oulu cycling and walking planning history

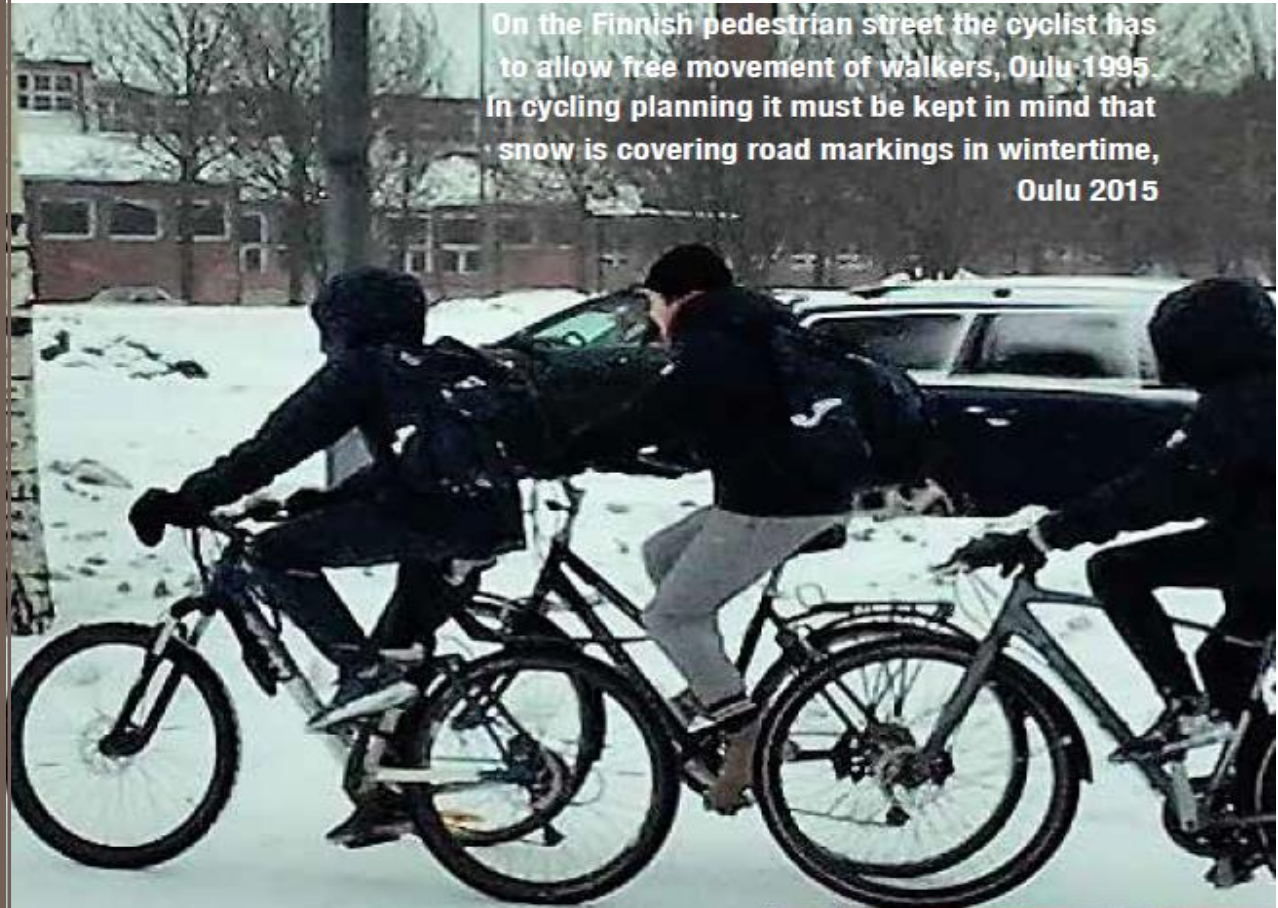
- 1967 The first attempt to start up experiments of the pedestrian zone
- 1969 Transport system plan
 - Walking and cycling were included for the first time
- 1972 City development plan of bicycle and pedestrian traffic
 - Extensive network separated from car traffic covering the whole city
 - Separate funding for bicycle and pedestrian projects
 - Major part of construction using other funding sources
 - Since then cycling and pedestrian planning have been a “part of the system”
- 1981 Development plan of bicycle and pedestrian traffic in the city center
- 1987 Pedestrian zone Rotuaari opens
- 1993 First extensions to Rotuaari
- 2007 Regional strategy for bicycle and pedestrian traffic
- 2010 City development plan for bicycle and pedestrian traffic
- 2011 - 2013 Further extensions to Rotuaari, also street heating installation
- 2012 Online cycling journey planner
- 2013 International winter cycling congress (www.wintercycling.org)
- 2013 Cycling coordinator
- 2014 Oulu cycling quality routes
- 2014 Green for cyclists –pilot



OULU'S CYCLING NETWORK: THE WORLD'S FIRST WINTER CYCLING CONGRESS 2013 IN OULU

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Oulu is a known cycling city in Finland. It has worldwide reputation in Winter Cycling. A large number of cyclists ride daily in summer and winter. There is a "movement culture" based on the excellent cycling network.



On the Finnish pedestrian street the cyclist has to allow free movement of walkers, Oulu 1995. In cycling planning it must be kept in mind that snow is covering road markings in wintertime, Oulu 2015

OULU'S CYCLING NETWORK: THE WORLD'S FIRST WINTER CYCLING CONGRESS 2013 IN OULU



7.2.2017

How Finland Gets People Biking Through Winter

FEBRUARY 7, 2017 AT 10:00 AM

A city of 200,000 people in Finland has more bike lanes than Canada's largest city.

BY EMILY MACRAE

Public Works looks at public space, urban design, and city-building innovations from around the world, and considers what Toronto might learn from them.



Photo by Grant D from the Torontoist Flickr pool

Winter cycling is still on fringes, but other cities show how it can work

TOM BABIN
More from Tom Babin (HTTP://CALGARYHERALD.COM/AUTHOR/TBABIN)
Published on: February 14, 2013 | Last Updated: November 26, 2014 7:43 PM MDT

2013



Out on the wintry pathways of Oulu, Finland.

OULU FINLAND — One of the fun things about attending [1 Bike Oulu](http://www.1bikeoulu.com/) (<http://www.1bikeoulu.com/>), an international winter bicycle conference in northern Finland, is seeing people realize there are others out there like them.

Never mind the plows: Five things we can learn from the world's most bike friendly winter city

TOM BABIN
More from Tom Babin (HTTP://CALGARYHERALD.COM/AUTHOR/TBABIN)
Published on: February 13, 2013 | Last Updated: November 26, 2014 7:43 PM MDT

2013



Everyone needs to believe in something. I believe I'll go ride my bike.

Home - All About Oulu

ABOUT OULU

© 2013 - by CYCLOCK - in Consulting, Unorganized, Winter Riding



Back in the fall, I was invited to sit in on a CBC discussion about active transportation (as opposed to the inactive type, where the only exercise you get is texting or (if you're me) giving people the finger). As a small group of us waited outside Stella's for the doors to open and the sweet, sweet coffee to start flowing, I was introduced to Anders Sævi.

2013

CATEGORIES

- Bike Shoppers
- Bike & Stuff
- Club Life
- Consulting
- Cyclocross
- Design
- Meetings
- On the Road
- Product Reviews
- Race Reports
- Rents
- The Campaign Experience
- The Guesstax Project
- Tour de France
- Training
- Travel
- Unorganized
- Winter Riding

BY DAY JOB



OULU'S CYCLING NETWORK: BEST IN ALL MODESTY

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How do the best ideas come?

”Cycling is a better tool for social interaction than walking the dog. And bike is better planning tool than a computer.”

My feet have been
on the ground or
on the pedals



The biker of the year
2015

VI THE VALUE OF ECOLOGICAL BIKING

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“We know well the myth that reducing emissions is expensive and requires wonderful technology.

But, it is not the truth”

“The social status of cycling may limit the growth of cycling”

The Copenhagen Mermaid 1989



THE VALUE OF ECOLOGICAL BIKING

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The Paris 2015 Climate Agreement obliges the government to of reduce emissions.

An important goal is to increase the walking and cycling 30 per cent more than today

Cycling has the high status in Copenhagen



Only in Denmark citizens are cycling 2,8 kilometres in a day.

VII CONCLUSIONS:

Societal, Methodological, Scientific/theoretical...

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To raise the appreciation of walking and cycling!



In Photos above and right: Speaker and his family in Washington DC 1967, 50 years ago!



- **Societal**
 - To raise the appreciation of walking and cycling.
 - To find and support key stakeholders, and key persons, to promote walking and cycling.
- **Methodological**
 - Delphi Method and *Futures Workshop* as a tool for walking and cycling analysis
 - Use of the other futures studies concepts, like **Strong Prospective Trend**, *Weak Signals*, *Wild Cards* as a key concept of futures walking and cycling analysis
 - Use of geographical concepts, like cluster as part of transportation analysis
- **Scientific**
 - Phenomena-based approach for walking and cycling
 - Benefit-cost models for impact on human wellness as a key factor
- **Development and Research Projects**

CONCLUSIONS: DEVELOPMENT AND IMPLEMENTATION PROJECTS

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- Create walking and cycling strategies / **Create visions and action plans**
 - in global, states, regional and community level
- **Create training and communication programs to promote walking and cycling,**
 - appreciate walking and cycling as much as other transportation
- **Create key persons networks in state and municipality level**



CONCLUSIONS: RESEARCH PROJECTS

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- Create research and **development programs** for walking and cycling
- Investigate increasing of walking and cycling to **reduce pollution, increase wellness, environment, cities' attractiveness, image**
- Supporting to develop walking and cycling **benefit-cost models**, "An Economic Assessment of Investment in Walking and Cycling", see e.g. Dr Adrian Davis March 2010



CONCLUSIONS - METHODS:

DELPHI METHOD AS TOOL PROMOTING WALKING AND CYCLING

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Futures research helps people to perceive what they want and what is possible, and learning of others' opinions.

The Delphi method is the most used futures studies method. It utilizes expert information

The use of the Delphi method has several advantages. The method is justified, inter alia:

- **(1) The problem cannot be analyzed using a precise analytical method;**
- **(2) Collective and subjective estimates are potentially useful in problem solving;**
- **(3) The problem is wicked or complex, and addressing or reviewing it there is no common language or method;**
- **(4) The Delphi method has the advantage that it is easy to connect to both qualitative and quantitative research approaches.**
- **(5) The Delphi method can be used to create an environment for learning and innovation.**

CONCLUSIONS: FUTURES RESEARCH PROJECTS

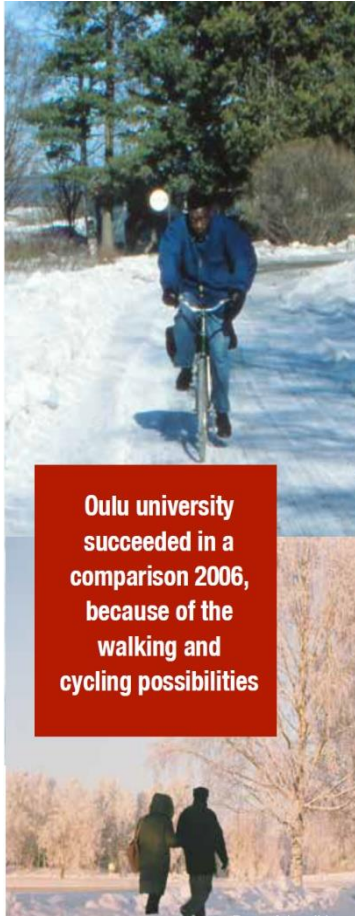
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- Strong Prospective Trend / Megatrend analysis and their impact on walking and cycling development
- Analyzing new phenomena, Weak Signals, what kind of new phenomena are emerging which should take account when developing walking and cycling possibilities
- Analyzing Wild Cards which may be big influences for walking and cycling (climate change?, environment accidents? etc.)
- New technologies, like big data, possibilities that promote walking and cycling
- **Utilizing futures studies crowdsourcing method like Delphi Method and Futures Workshop in foresight research social impacts analysis etc.**

REFERENCES

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MAURI MYLLYLÄ



POLITICS
TACIT KNOWLEDGE
GOOD CITY
INFLUENCING
OULU'S CYCLING NETWORK
VALUE OF ECOLOGICAL BIKING

Thank you for your attention!

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