

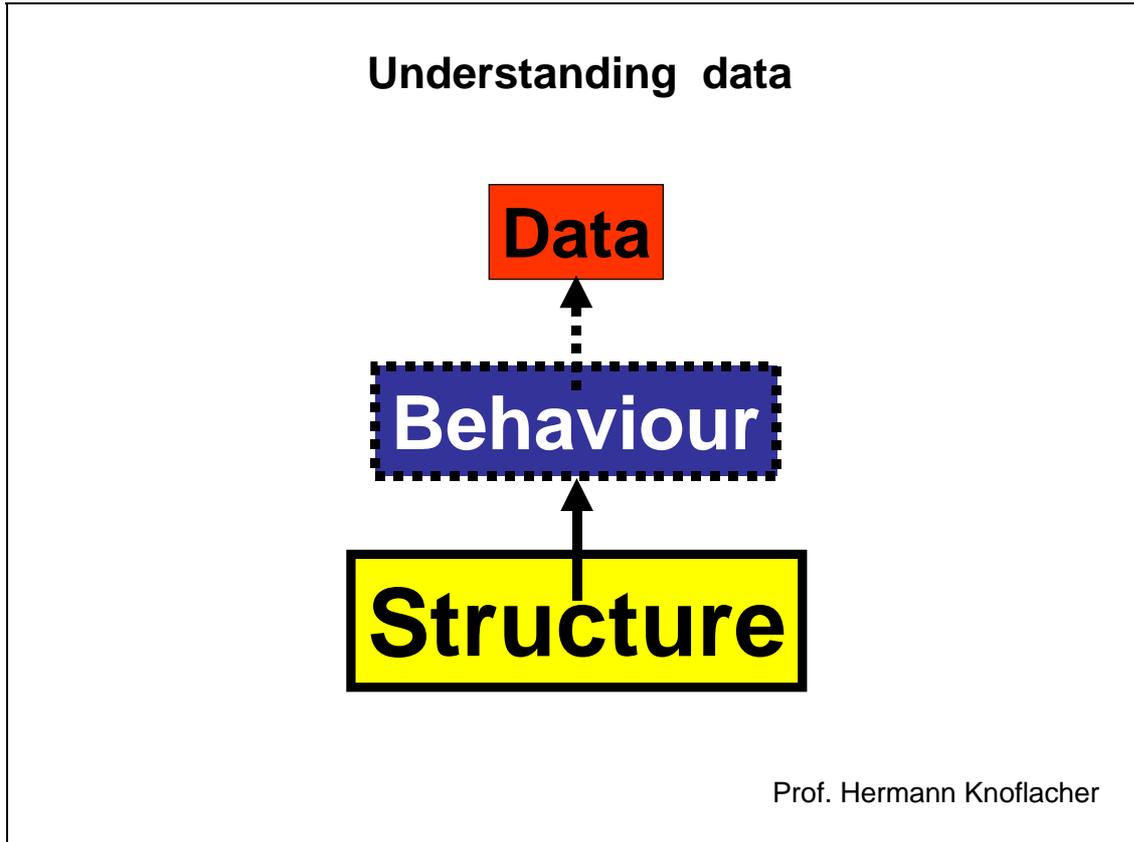
UNDERSTANDING DATA: INFLUENCE OF CITY STRUCTURE ON HUMAN BEHAVIOUR, TRAFFIC AND PUBLIC TRANSPORT

Institute for Transport Planning and Traffic Engineering
Technical University of Vienna, Austria.

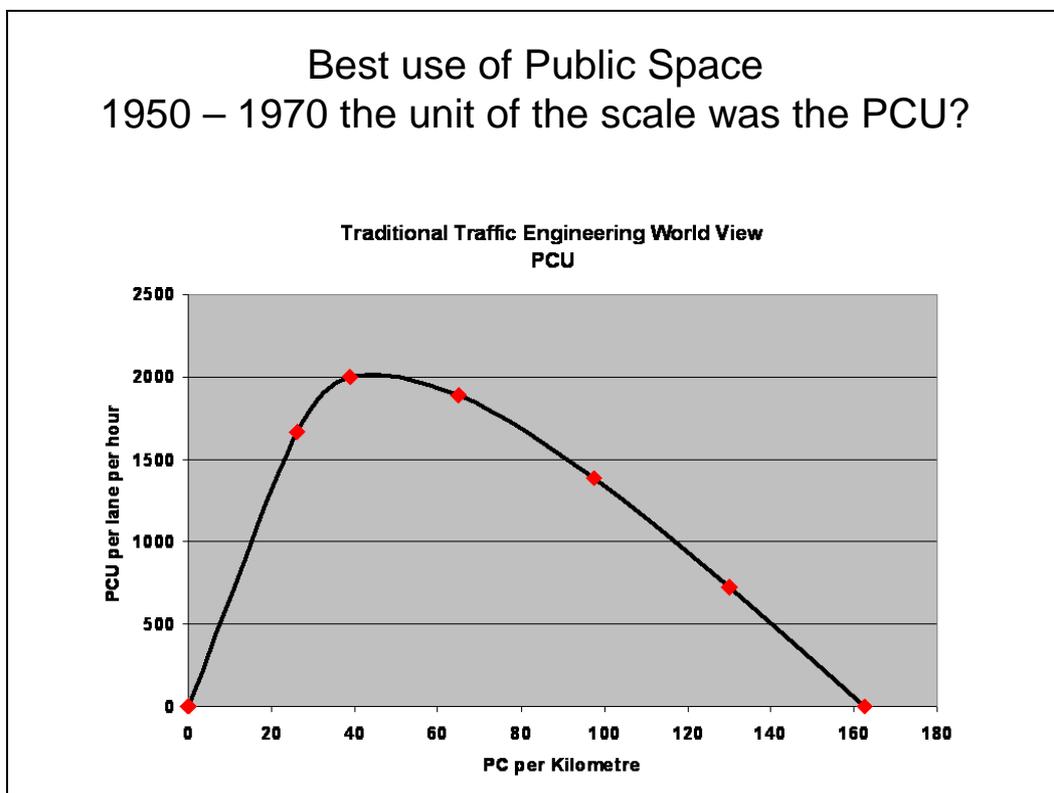
Summary of Presentation: Hermann Knoflacher

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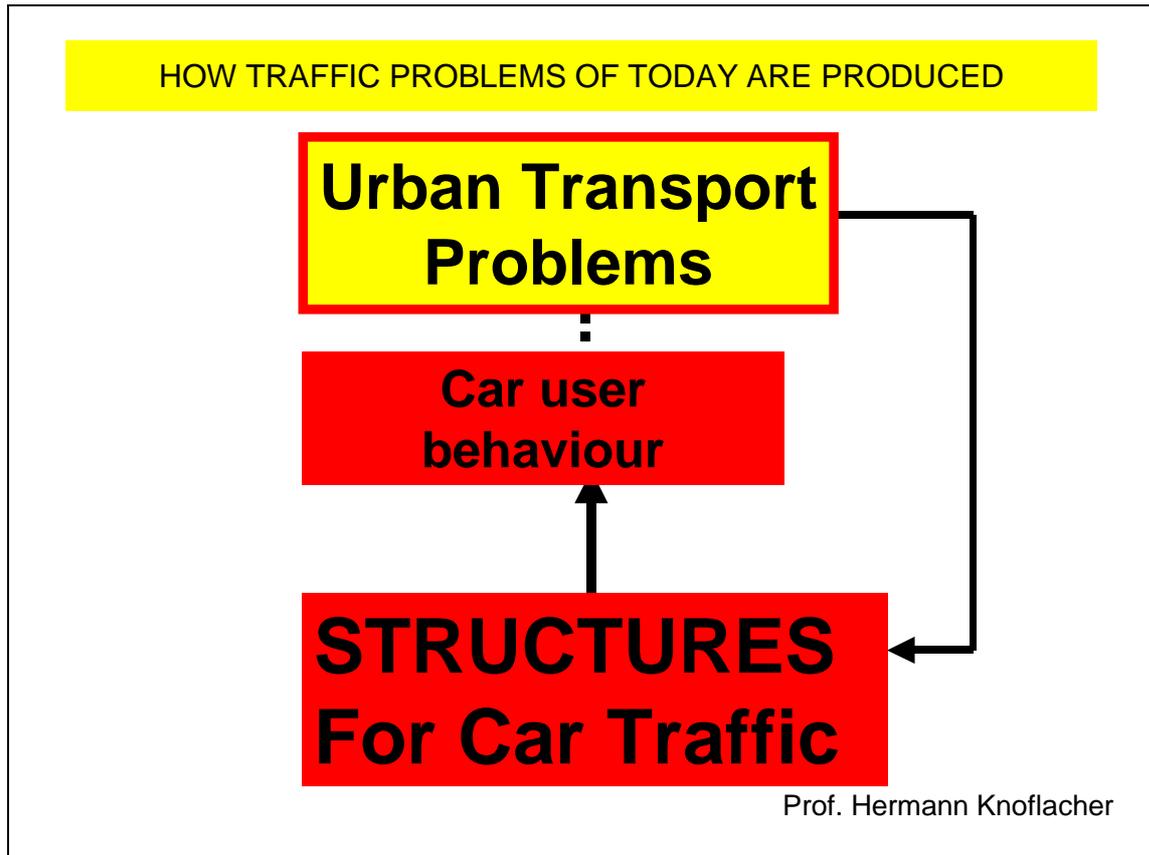
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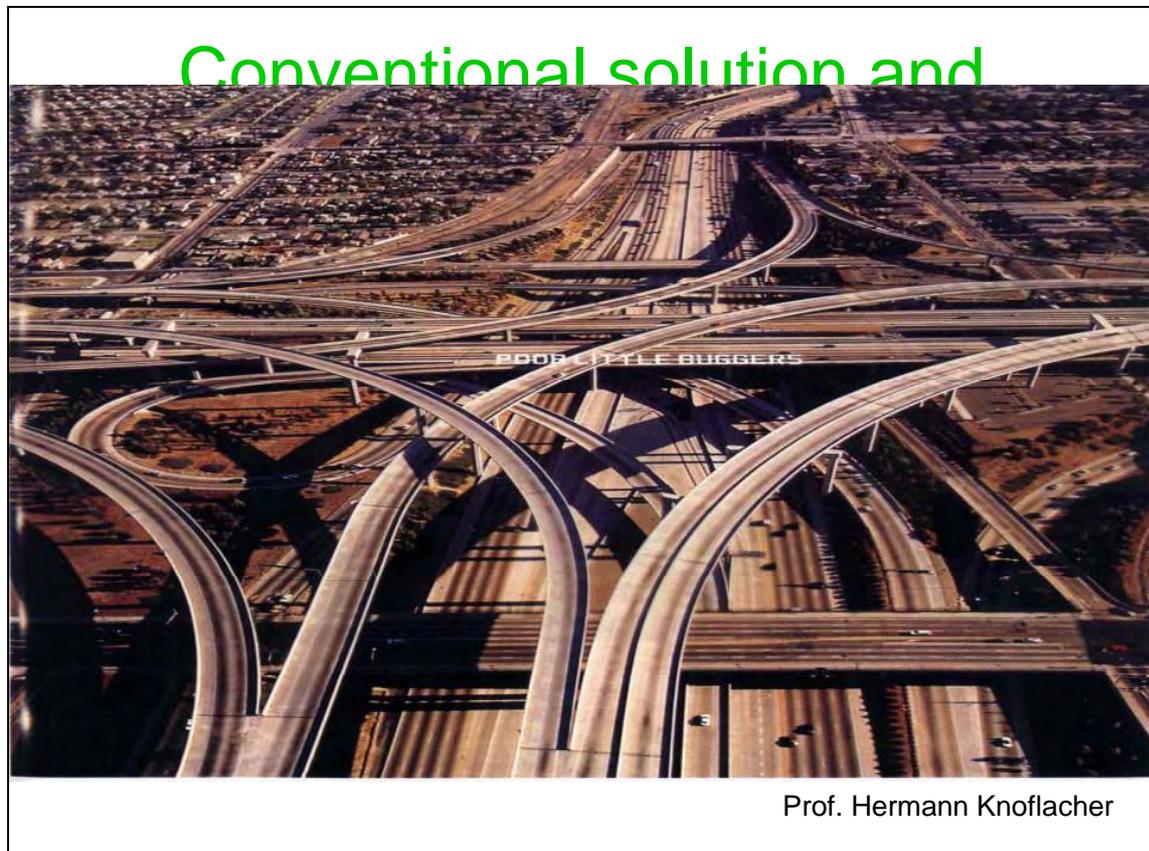
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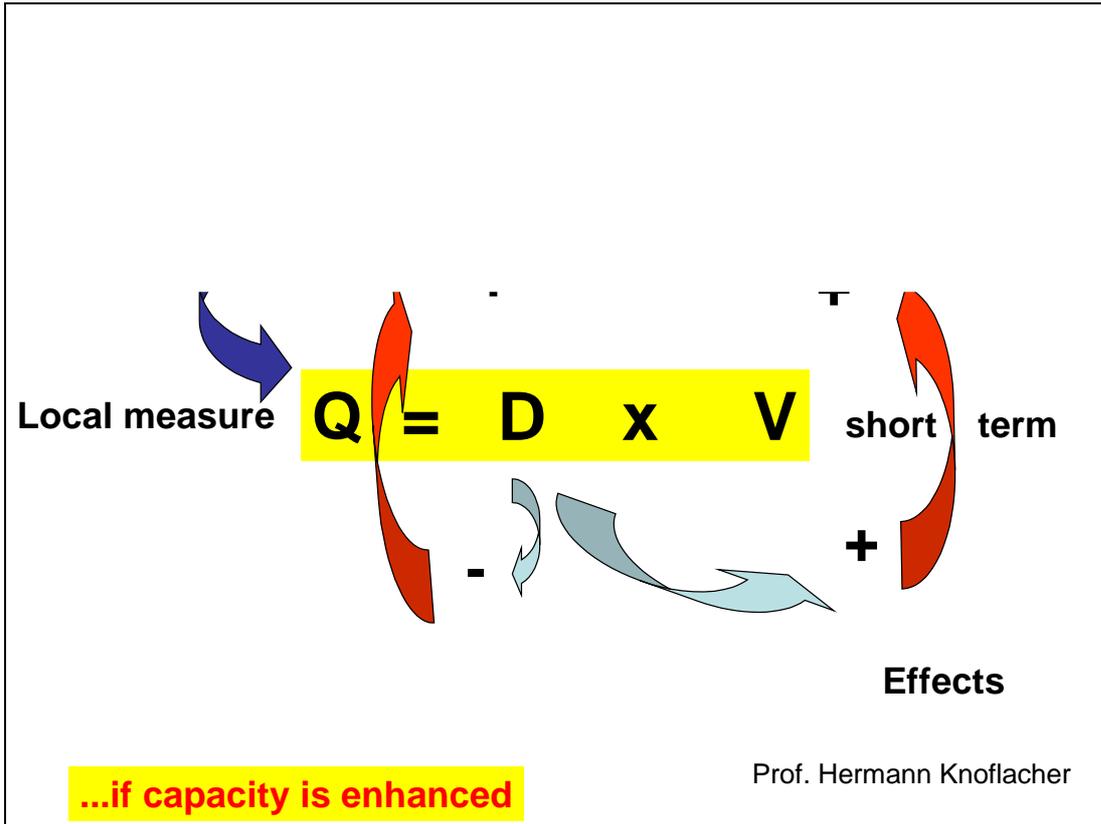
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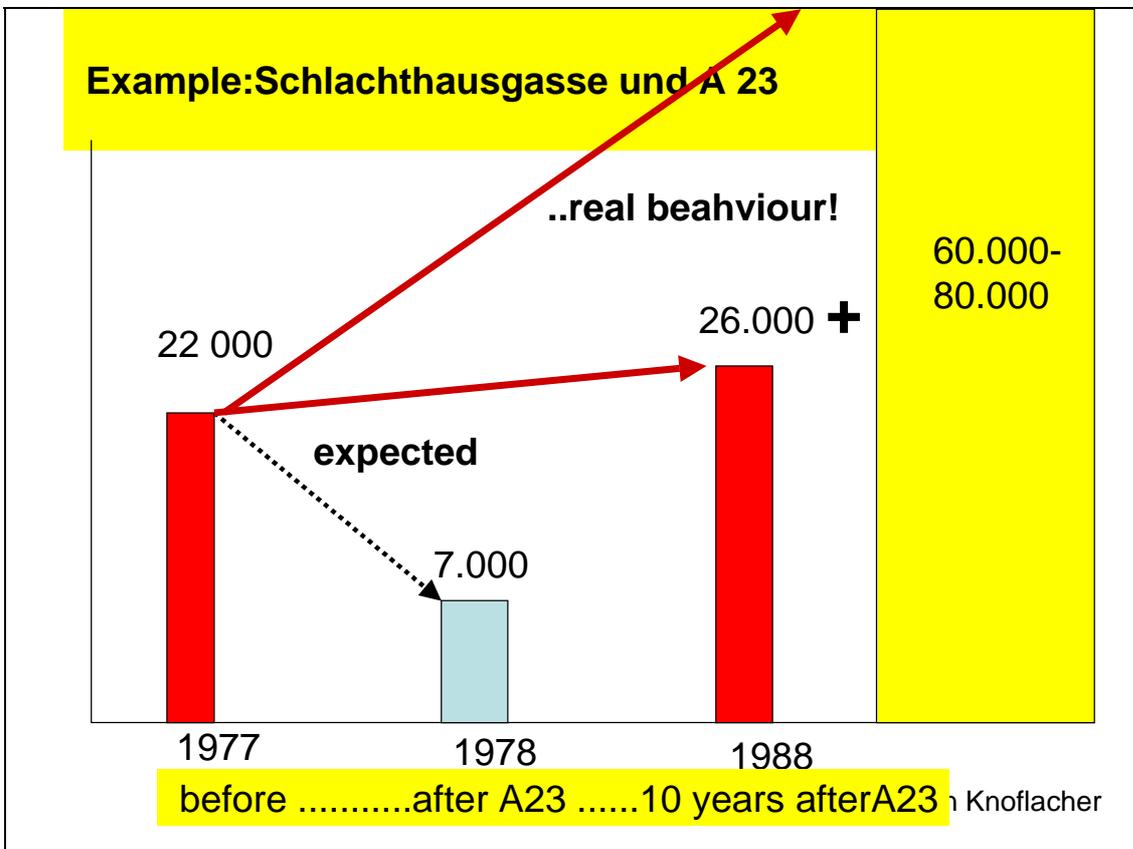
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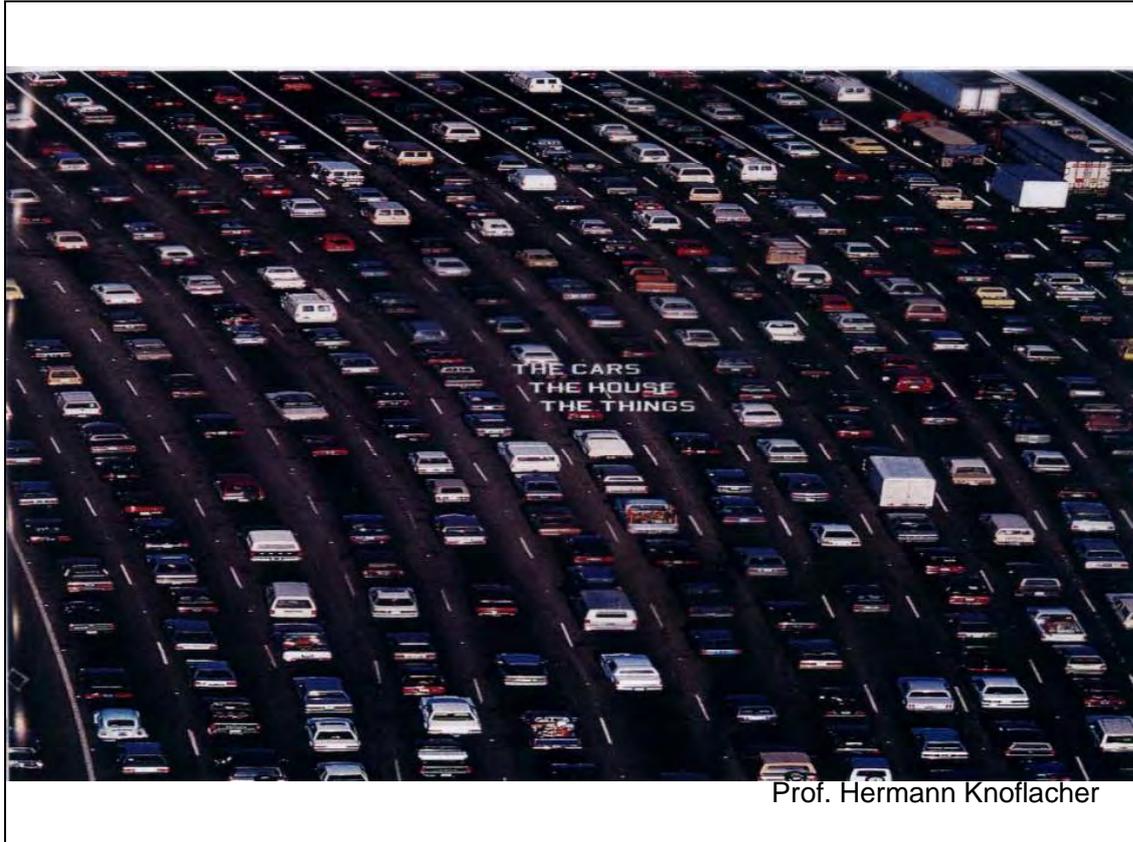
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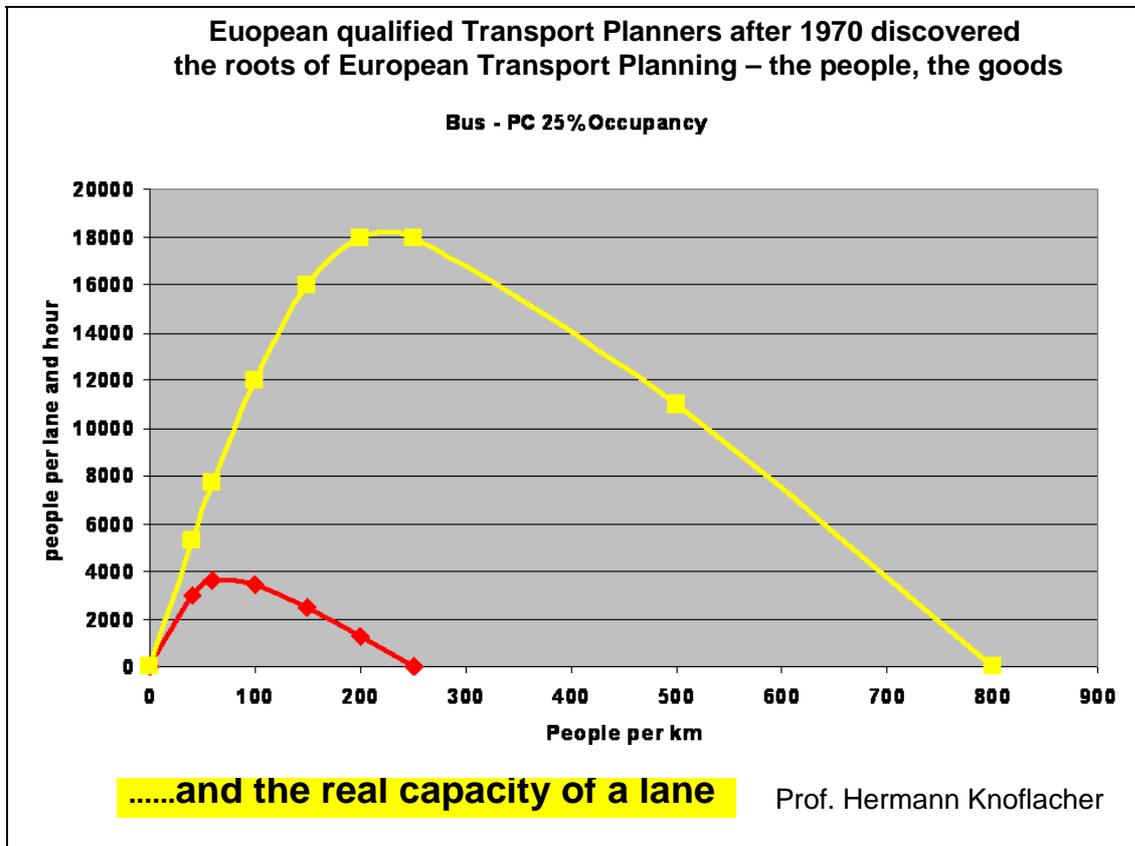
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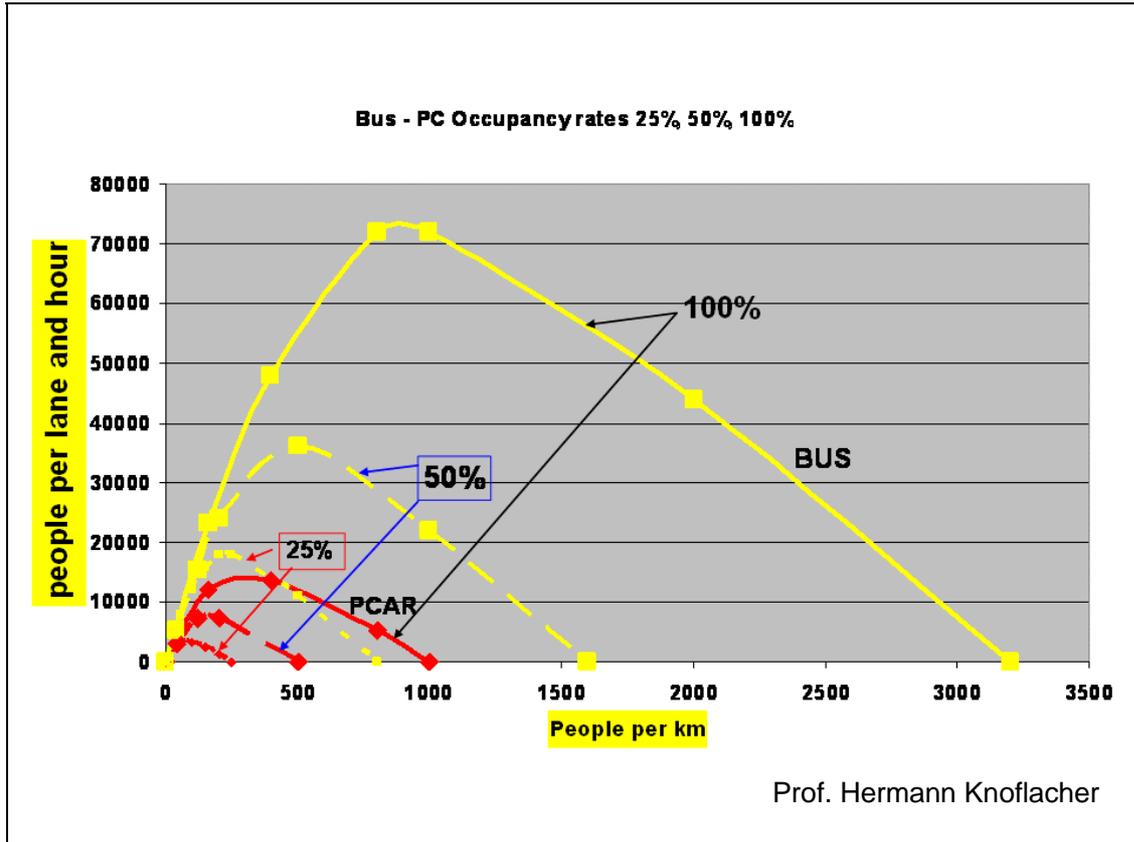
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London

Slide 14

Long way to political action

Mayor Hans Joachim Vogel Munich 1970

“..each million we invest into urban motorways is an investment to destroy the city“

- **Mayor Ken Livingston 2003**
 - “...in central London, it is impossible financially or physically to solve transport needs on the basis of further extending use of private cars.
 - It is for this reason that we must radically improve public transport and introduce measures to reduce congestion.”

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Examples of Effective Measures

Vienna 1995 parking fee in all Inner districts

- Commuter car traffic reduced by 25%
- Public transport use increased by 6%
- Speed increased from less than 10km/h to 14 – 16km/h
- Benefits for shops
- Congestion is not a problem anymore in this part of the city

•London Results (February 2004)

- Traffic reduced by 20% (cars by 30%);
- Delays reduced by 32% – 40%;
- Speeds increased by 30%;
- Journey times to central London reduced by 14%;
- Bus patronage increased by 14% (morning peak hour);
- Number of buses in the zone increased by 19%; and
- Excess waiting time at bus stops fell by one-third.
- Cycle traffic increases by 20%

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Eisenstadt Before 10 000 cars, 6000 pedestrians per day



Eisenstadt after: 30 000 pedestrians per day plus



HOW TRAFFIC PROBLEMS can be solved

Urban Problems solved

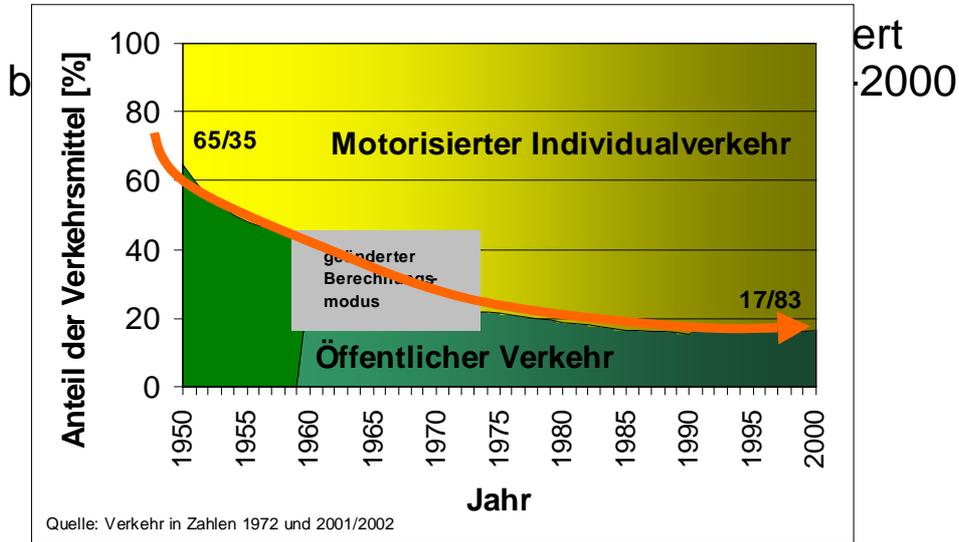
Social Behaviour or Urban People

Structures for Pedestrian Cyclists Public Public Transport

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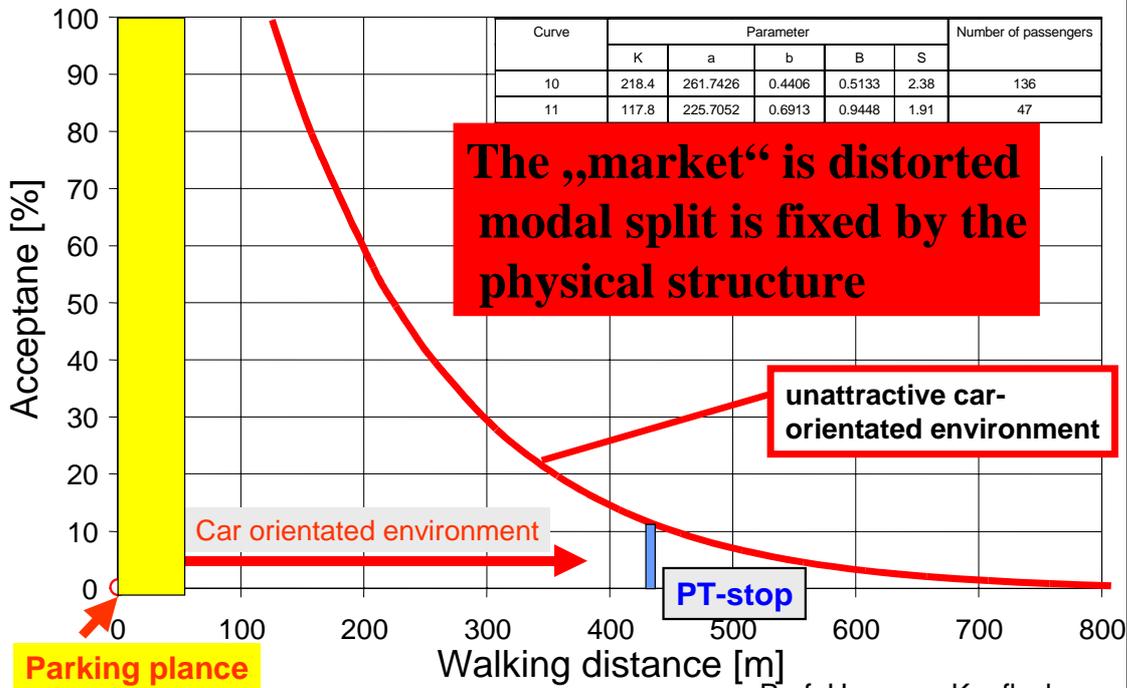
If we don't learn from the past we have no chance in the future. Europe was very late!



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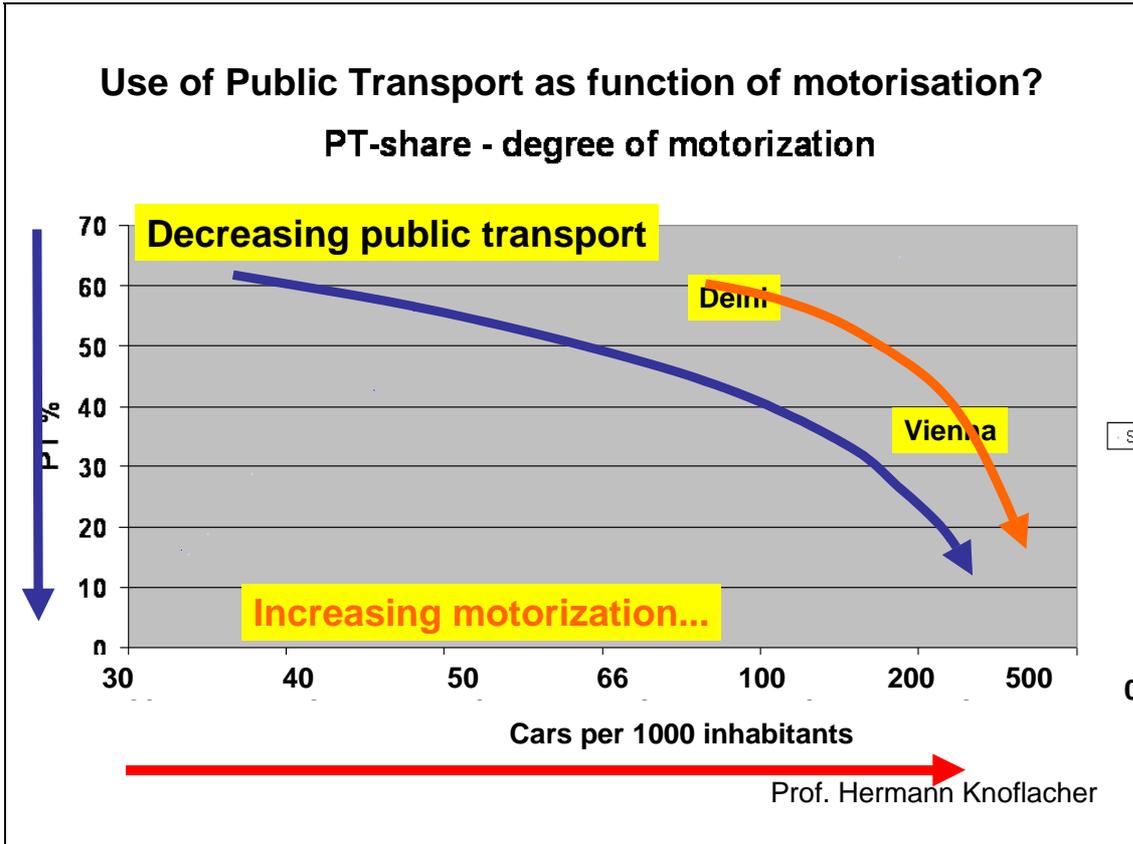
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How People behave?

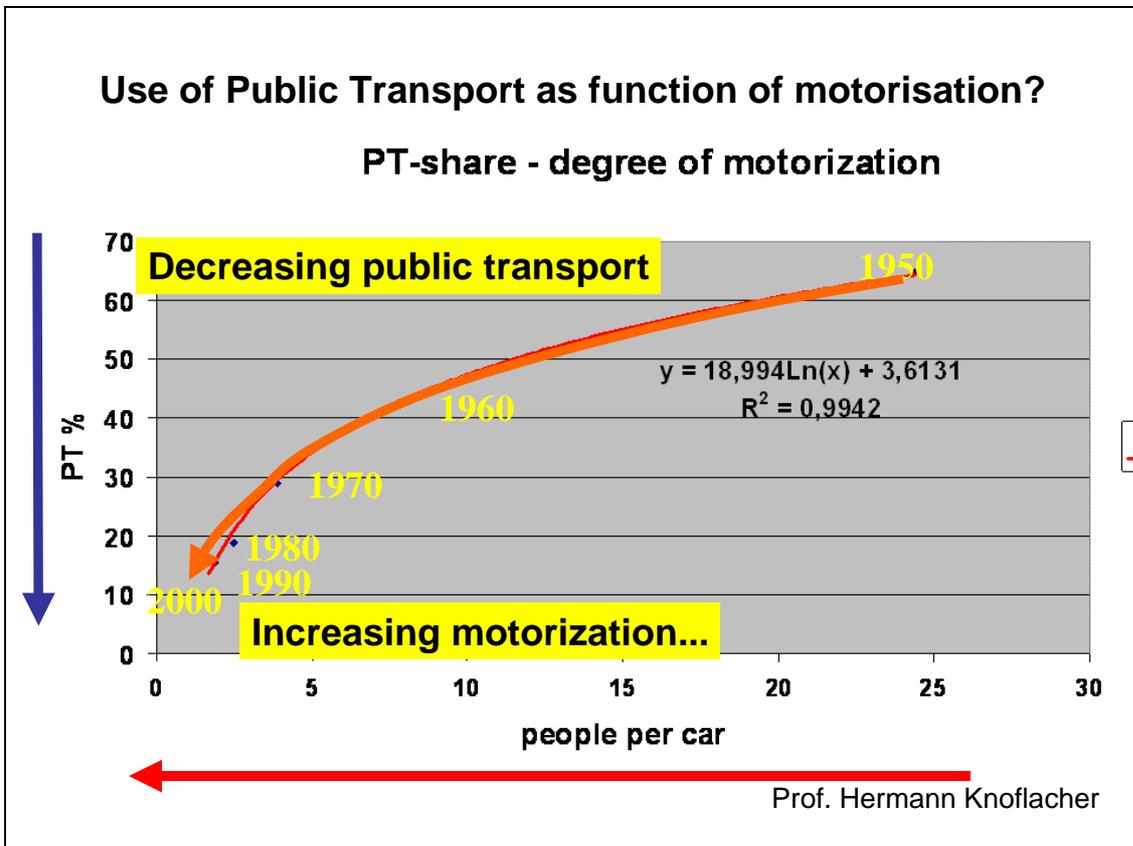


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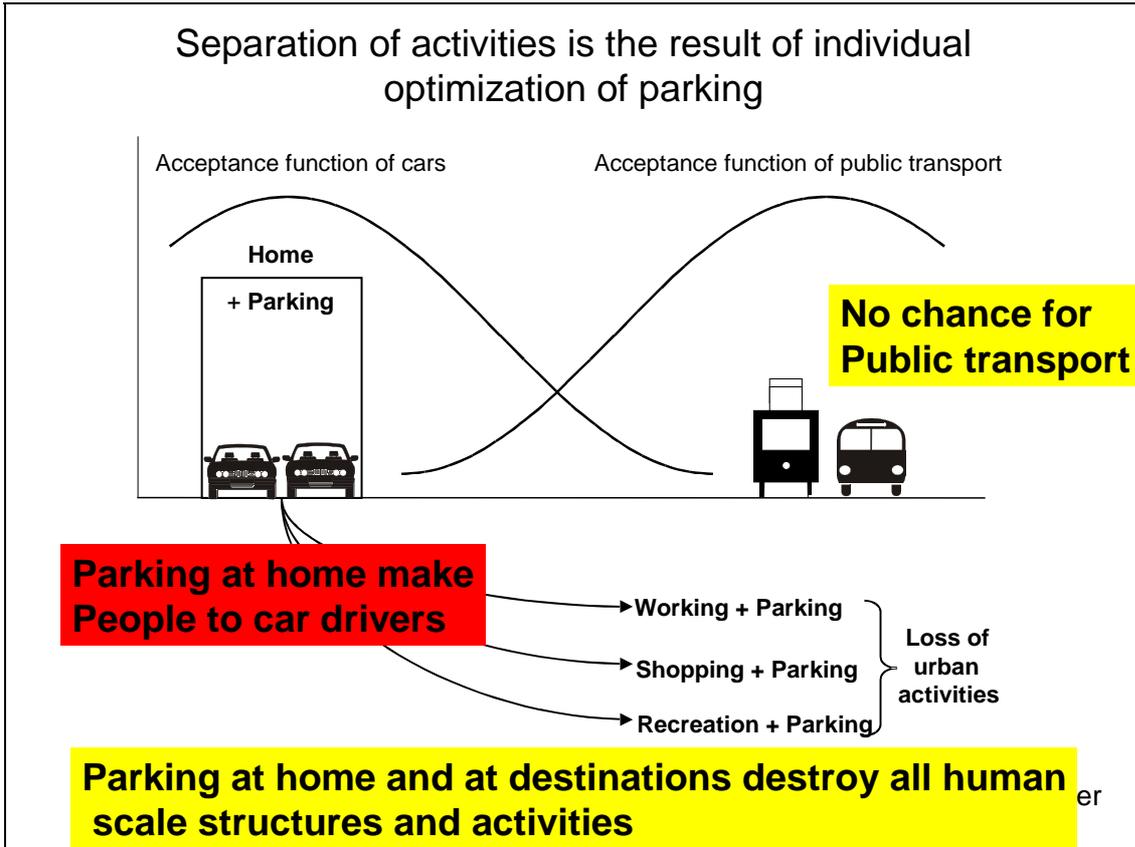
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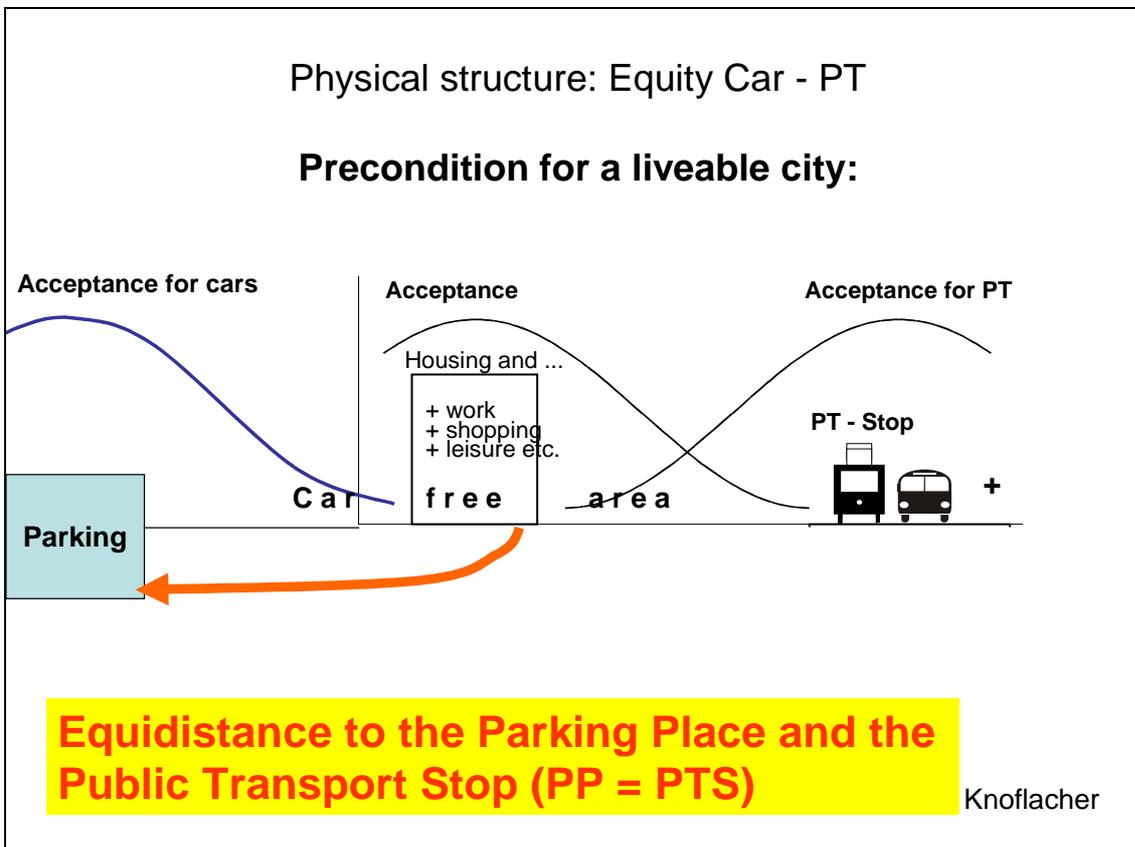
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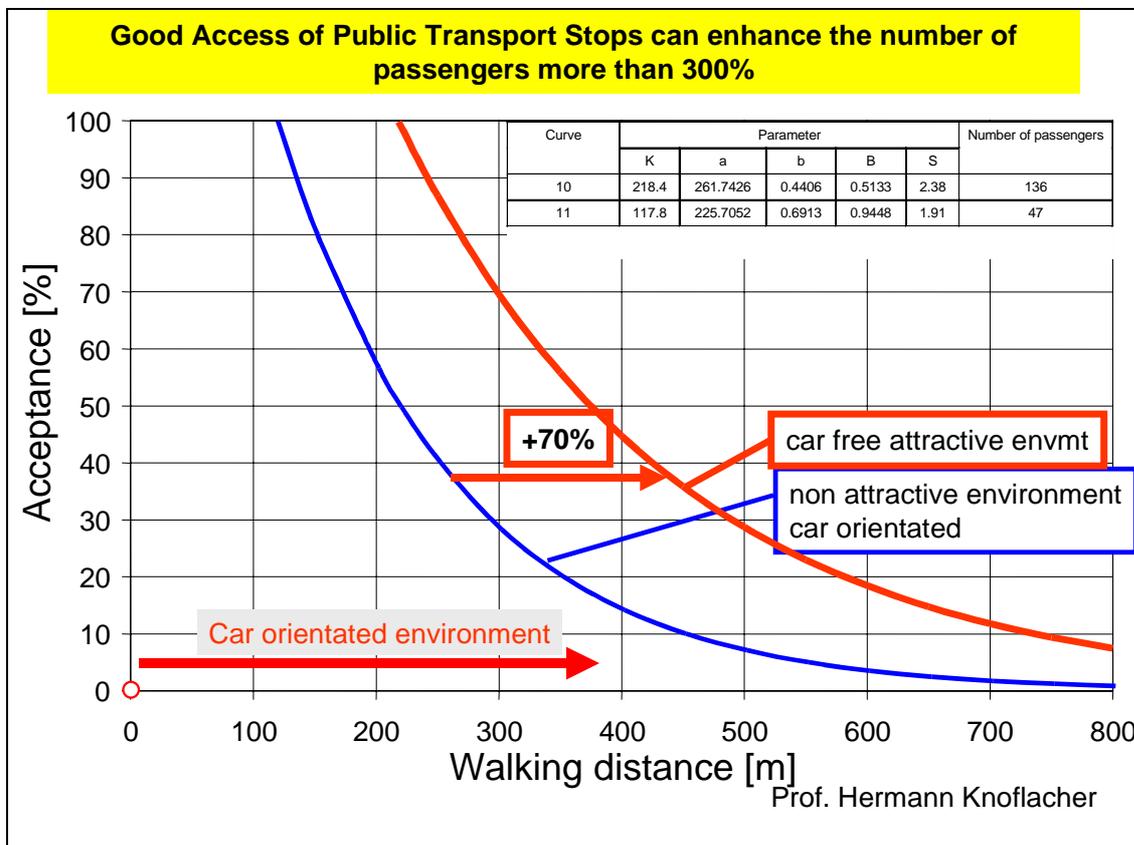
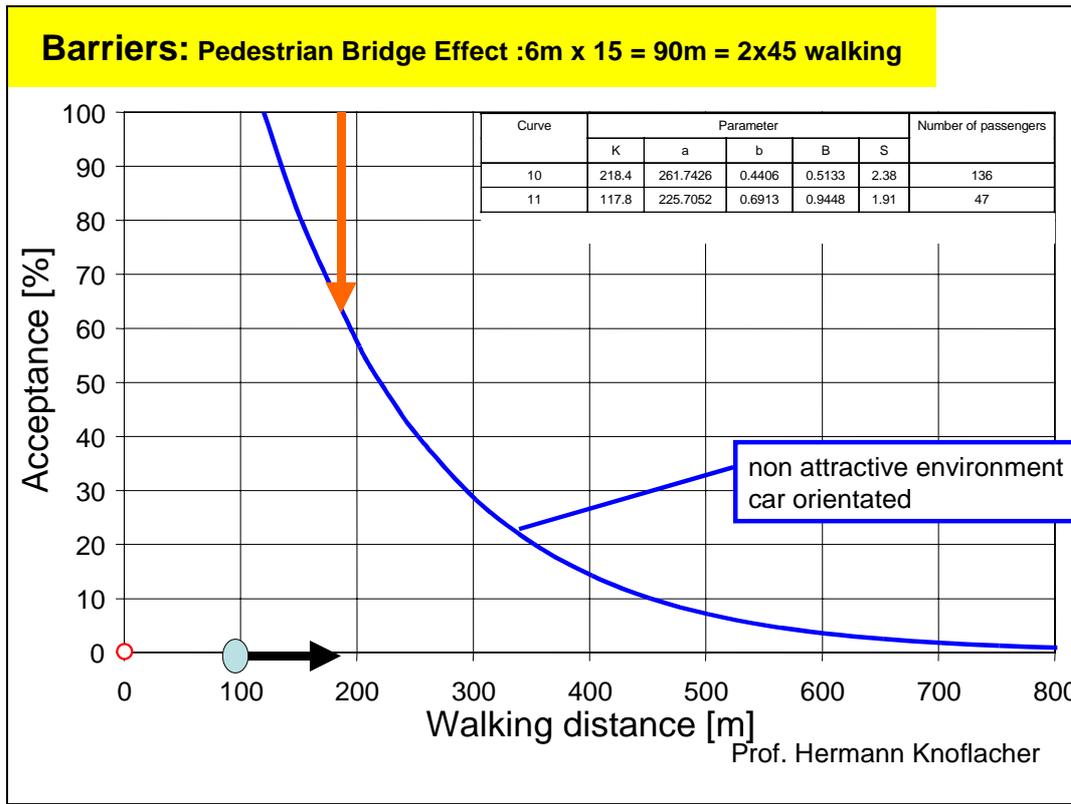


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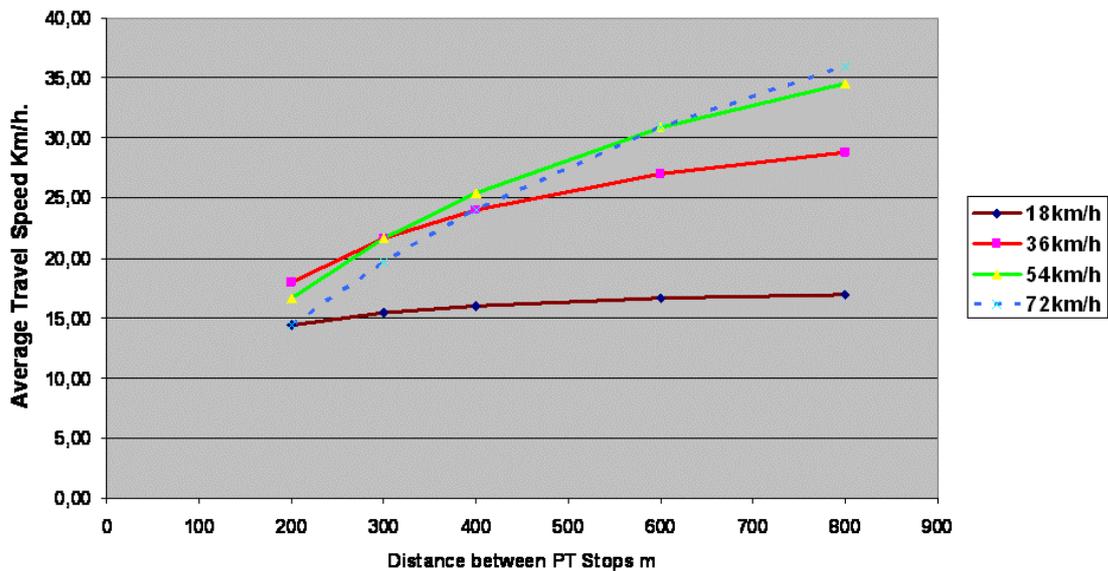
The corridor

What is the right distance between Bus stops?

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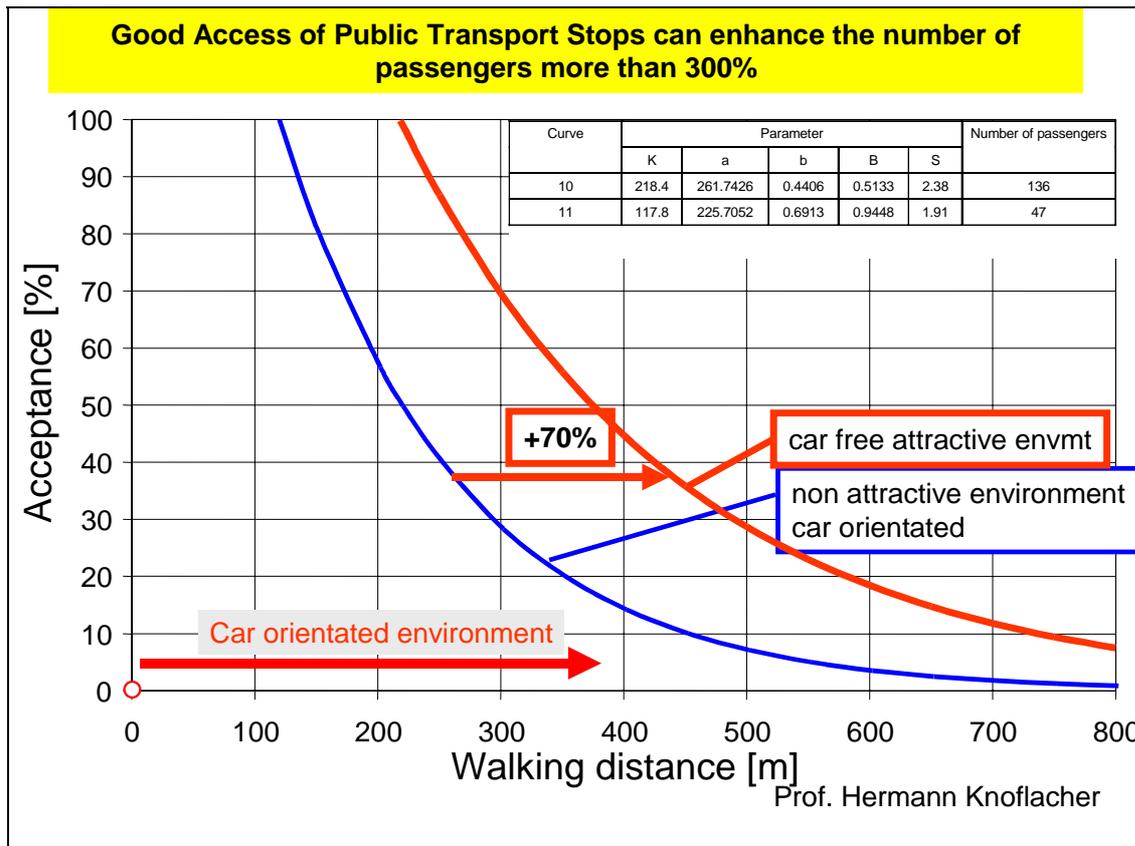
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Distance between Stops – Average Travel Speed
Acc/Decc 1m/sec² + Boarding time



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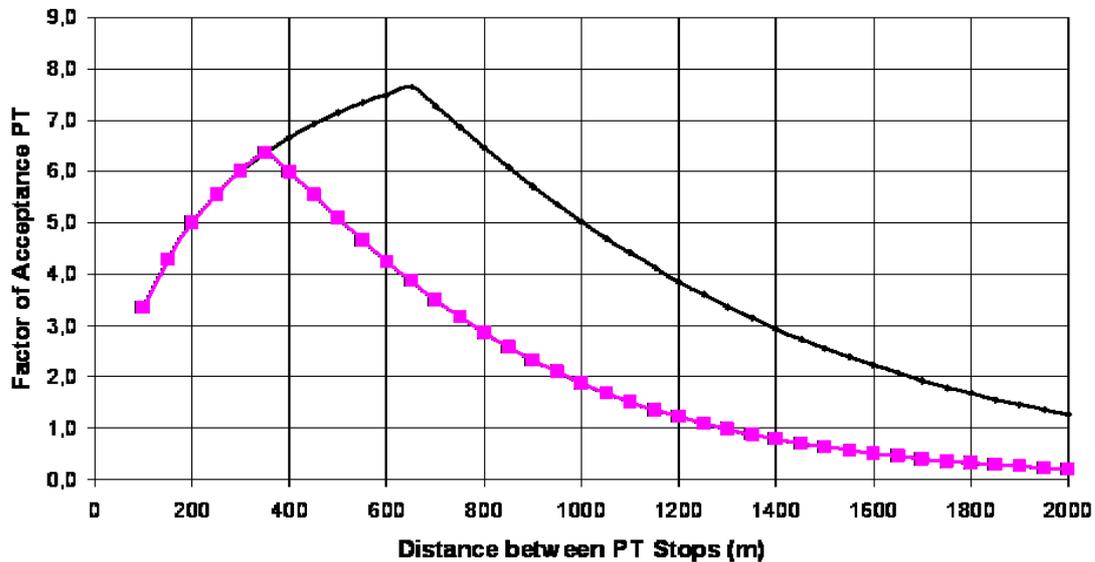
Not only Physical Structures..

- ...but also Organisation, Regulations and Law
- Financing
- Management and Monitoring
- Culture
- Promotion

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Optimal Distance between PT stops, taking into account real human behaviour



Maximum Speed 50 km/h

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International

- Trends,
- Guidelines
- Recommendations
for Urban Transport Measures

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**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL,
THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

Towards a thematic strategy on the urban environment

“ ... promoting an integrated horizontal approach across Community policies and improving the quality of urban environment, taking into account progress made in implementing the existing co-operation framework, reviewing it where necessary, and addressing:

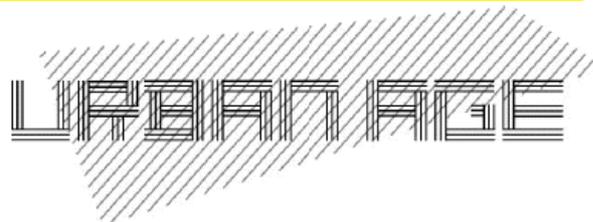
- the promotion of Local Agenda 21;*
- the reduction of the link between economic growth and passenger transport demand;*
- **the need for an increased share in public transport, rail, inland waterways, walking and cycling modes;***
- **the need to tackle rising volumes of traffic and bring about a significant decoupling of transport growth and GDP growth;***

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„We as European Cities, who make all efforts to improve the quality of life by supporting Walking, Cycling and Public Transport, can not understand, why Majors in the developing countries still invest so much into car traffic, which deteriorate the quality of urban life and urban economy.“

European Mayors 2005



a worldwide series of conferences
investigating the future of cities

organised by the Cities Programme
at the London School of Economics and
Political Science and the Alfred Herrhausen Society,
the International Forum of Deutsche Bank

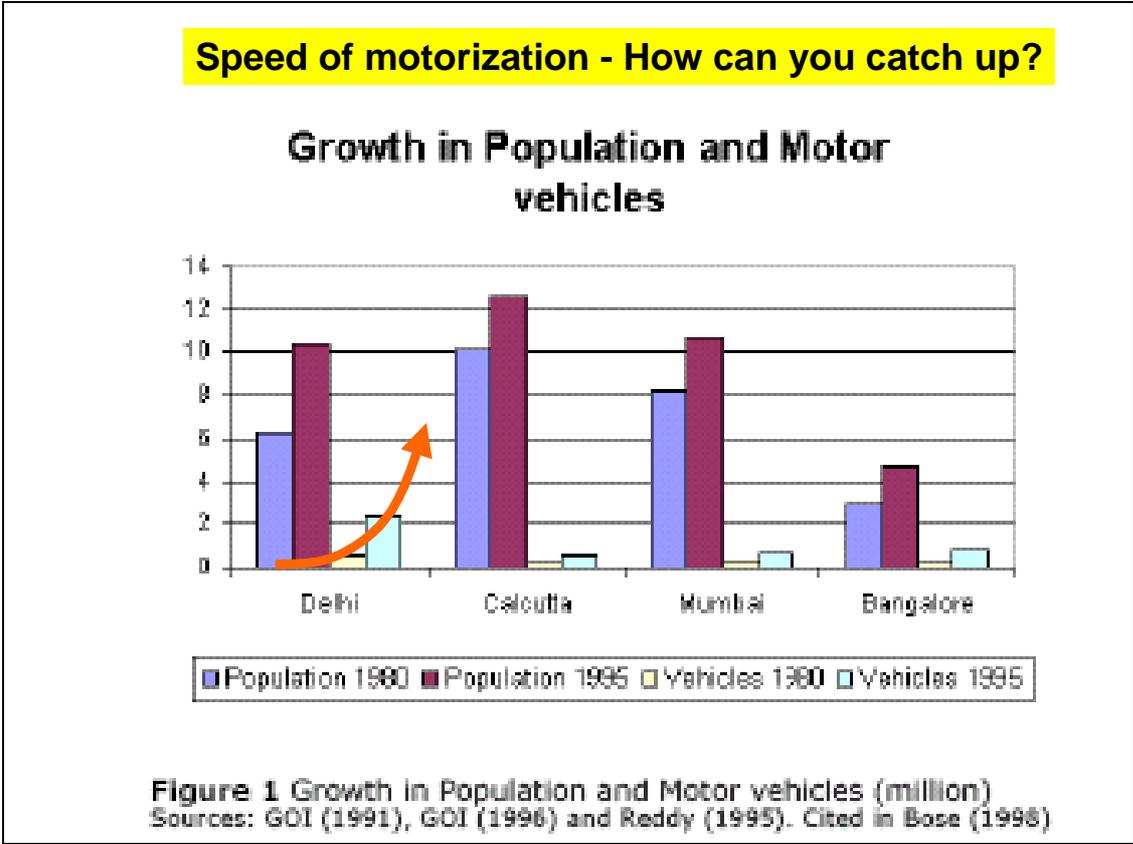
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.....but....

**..the System is an
Dynamic System**

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From Words to Actions
Speed matters

- **If we are to late**
- **Costs can not bring back lost chances**

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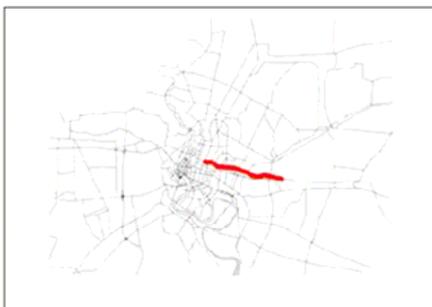
Systems at the same cost

„set the foot into the door before it is closed“

How much does
1 billion US\$
buy



426 kilometres of BRT

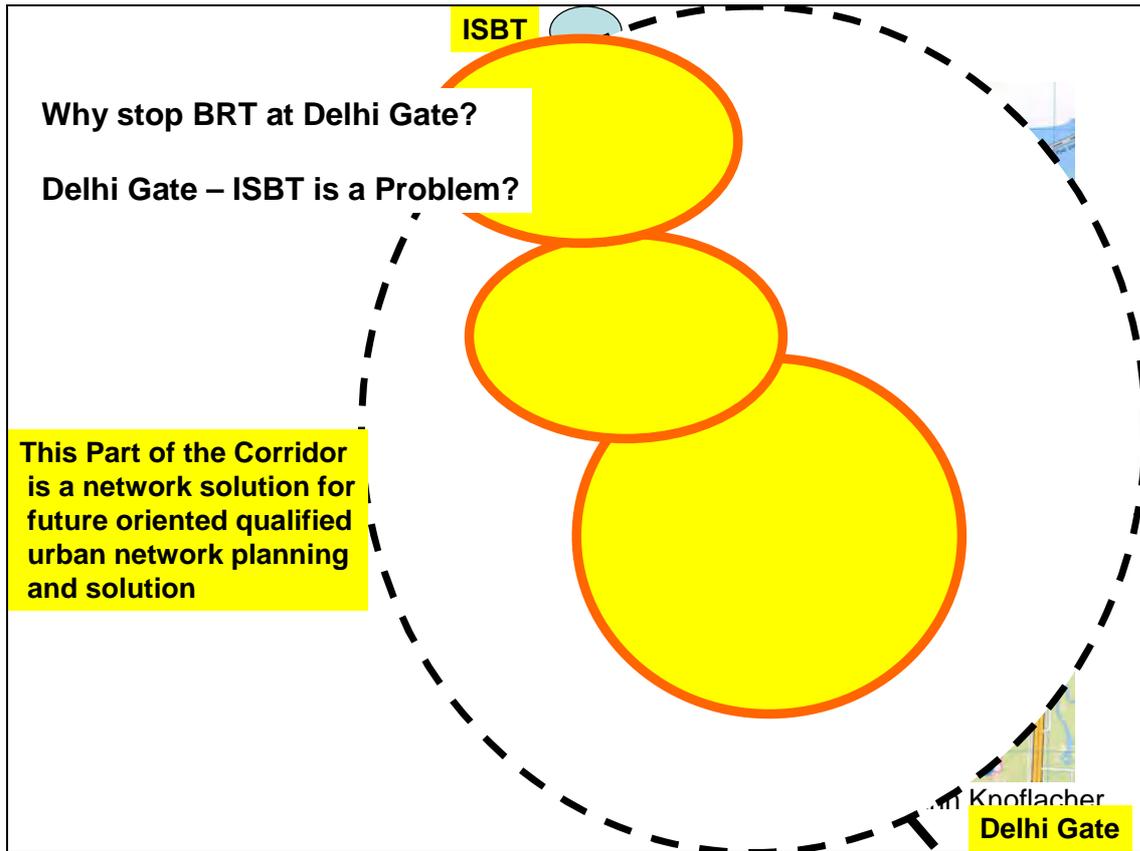


14 kilometres of elevated rail (BTS)



7 kilometres of subway (MRTA)

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