Polytechnic Summit
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Changing the Mobility Behavior

Prof. Dr. Bernd Steffensen
Department of Social Sciences
University of Applied Sciences Darmstadt

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Agenda

1. Introduction and Impressions
2. What is/means Transport? – Definition and Concept
3. Innovation in the Field of Mobility Behavior
4. Mobility Behavior
5. An Example for Change
6. The Future
1. Introduction and Impressions

source: http://dml-hfg.de/category/links/
The Concept "Car"

We could drive much faster …

∅ 1 hour daily

∅ Daily average

A lot of space for one person

700 km

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## Monthly payments for a car
New car during the first 4 years

<table>
<thead>
<tr>
<th>Type of Car</th>
<th>Overall monthly expenses in €</th>
<th>Expenses per km in €-cent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>Microcar</td>
<td>317,-</td>
<td>363,-</td>
</tr>
<tr>
<td>Compact car</td>
<td>324,-</td>
<td>392,-</td>
</tr>
<tr>
<td>Lower Medium Sized Car</td>
<td>355,-</td>
<td>470,-</td>
</tr>
<tr>
<td>Medium Sized Car</td>
<td>497,-</td>
<td>613,-</td>
</tr>
<tr>
<td>Upper Medium Sized Car</td>
<td>603,-</td>
<td>927,-</td>
</tr>
<tr>
<td>Luxury Car</td>
<td>1.475,-</td>
<td>1.711,-</td>
</tr>
</tbody>
</table>

[https://www.adac.de/infotestrat/autodatenbank/autokosten/](https://www.adac.de/infotestrat/autodatenbank/autokosten/)
Just a few steps and approx. 80 years away

Just a few steps and approx. 80 years away

http://www.westlafayette.in.gov/egov/apps/slide/show.egov?id=43;view=item;id=43;orderBy=rand#&gid=null&pid=20
2. What is / means Transport?
What is / means Transport?

A → B

German: „momentary whereabouts“

German: „need“
Schatz, hast du die Pässe eingesteckt?

“Darling, did you bring the passports?”

“I hope I will be in time at the meeting!”

“Have you got everything for school?”

“Why is it always me who has to take care of this …. customer?”

Walking to the doctors

Traffic and Transport are interwoven with needs and things we want to do/accomplish at „B“

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Why do we think about …

→ … instead of thinking about B

A → B?
3. Innovations
The Socio-technical Regime

Automobility ... a Socio-Technical System

1. The Car is „the“ industrial product in our societies
2. Social and technical links (oil industry, infrastructure, maintenance, driving schools etc.)
3. The world’s most important consumer of resources
4. At the heart of individual consumption provides social status
5. Excepted as „the“ dominant private mode of transportation
6. Culturally connected with the idea of a „good life“

The socio-technical Regime

Increasing Structuration of action (social practice – Anthony Giddens)

The socio-technical „Landscape“ – exogenous context

Innovations in Niches

Markets, User expectations

Science

Politics

Culture

Technique

Industry

A technological Cycle

Traditional Individual Mobility
We still talk about horsepower ?!!!!
The mass produced car for the masses
Green-red zone map individual Electric car (○) and the self driving car (□)

Obstacles to innovate

The socio-technical Regime

"Landscape" – exogenous context

Increasing structuration of action (social practice – Anthony Giddens)

Markets, User expectations

Science

Industry

Politics

Culture

Technique

The socio-technical system is dynamically stable
Changes occur on different levels

External Influences on the Niches (by expectations and networks)

Developments in the context ("Landscape") exerts pressure on the established regime which opens and offers opportunities for novelties and change.

Breakthrough to a new configuration, utilization of the "window of opportunity"
Adaptations in the socio-technical regime.

Elements are developed in a coordinated mode and stabilized in a dominant design.
Growth of internal momentum.

Innovations in Niches

Small networks of actors support novelties because of expectations and visions.
Multi dimensional processes of learning.
Intentions to connect a variety of elements seamlessly.

The new socio-technical regime leads to changes in the context/"Landscape".

Graphical representation of the socio-technical system and its interactions.
4. Mobility behavior
Schatz, hast du die Pässe eingesteckt?

“Darling, did you bring the passports?”

“I hope I will be in time at the meeting!”

“Have you got everything for school?”

“We don’t think about transport – it is part of our daily routines.”

“Why is it always me who has to take care of this …. customer?”

On their way to work

Walking to the doctors

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We look for and use …

1. ... established modes to act, which were generated in the past and were successful.
2. Modes to act others use in similar situations.
3. We develop „expectations of expectations“: How do relevant others think about us and the right way to act?
4. The momentary infrastructure (is there a bus that brings me from „A“ to „B“ etc.)
5.
An Example
Former Lincoln Barracks:
3.000 Inhabitants

Former Cambrai-Fritsch-Barracks/
Jefferson Settlement:
2.500 Inhabitants
Alternative means of transportation

Public Transport:

Bike-Sharing:

Incl. 🚴‍♂️

Car-Pooling:

Car-Sharing: book-n-drive®

Foto: HEAG mobilo

Foto: Samaan

Quelle: Bauverein AG

Quelle: Book-n-drive
6.
The Future?