„We don't need a car right now"

Studying transport preferences and attitudes among young adults in Budapest, Copenhagen and Karlsruhe

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# Transport as a socio-technical system

- Stable configuration of elements for decades
  - Deep-structural rules guiding behaviour and perceptions of actors
  - Incremental changes, following path-dependencies of mobility regime
- External framework conditions caused transformation pressure
  - Changes do not happen in isolation, instead co-evolutionary dynamics
  - Alternatives are developed and proposed by pioneers

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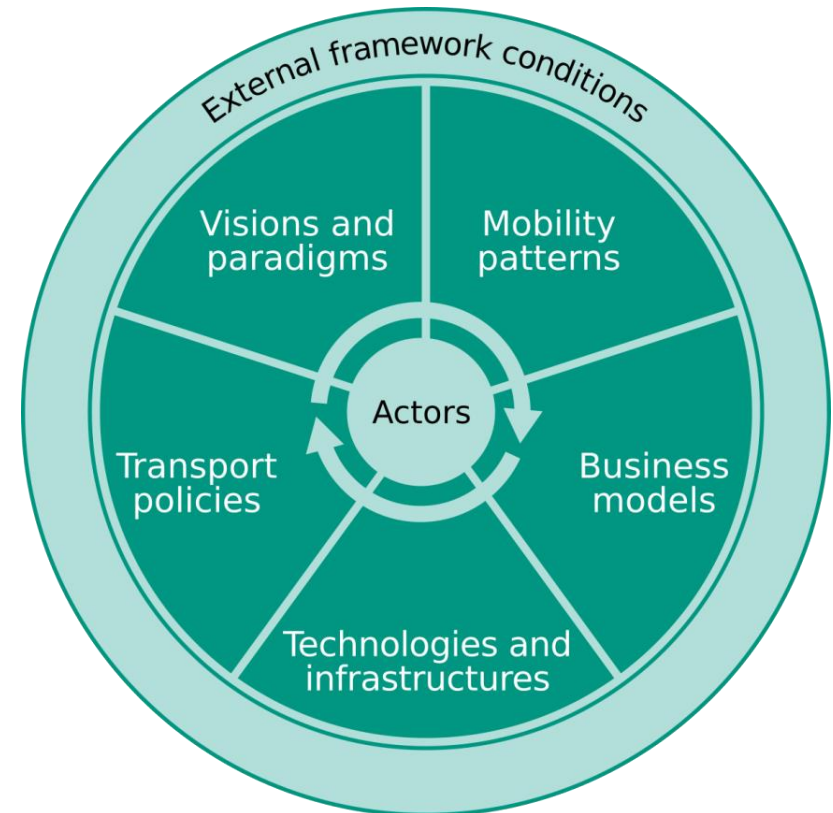
Mobility patterns of young urban generation

- Young urban generation is increasingly trying out these alternatives

- Recent trends in mobility behaviour of young urban generation
  - Car ownership decreases
  - Car usage decreases
  - Multimodality increases

Car availability per age cohorts
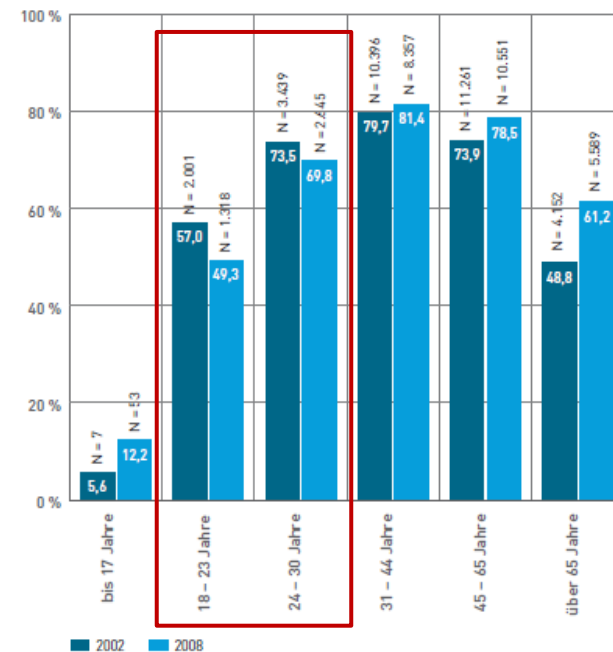
Source: Schönduwe, Bock, Deibel (2012)

What does the literature provide for explanatory approaches?

Explanatory approaches for behaviour change

Organisational re-configurations
- Investments in cycling infrastructure and public transport
- New business models (e.g. car- und bikesharing)
- Restrictions of car-based transport

By: Gehl Architects

Socio-economic conditions
- Postponement of economic independence
- Postponement of life- and family planning
- Rising costs of living

By: Stagiaire MGMIO

Evolution in collective values and lifestyles
- Increasing pragmatism in relation to cars
- Decreasing emotionality in relation to cars
- (Environmental awareness)

By InSapphoWeTrust

Media usage
- Smartphone penetration rates increase continuously
- Travel times is used differently
- Booking and information is easy

By: BBC News

Research questions

- Which co-evolutionary dynamics are at play in Budapest, Copenhagen, and Karlsruhe?
    - How do young urbanists perceive cycling, the meaning of the car and vehicle sharing against the background of different transport realities?

- Are behaviour changes structurally caused (e.g. due to socio-economic conditions of this generation) and thus limited to a certain phase of life?

    or

- Is there any evidence that changes point to institutional changes and are thus transferrable to future phases of life and/ or other generations?
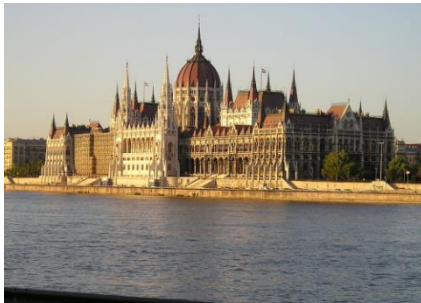
How are the transport realities in Budapest, Copenhagen and Karlsruhe and how do young urbanists perceive these?

Method

- Interview Meetings in:

Budapest   Copenhagen   Karlsruhe

- Small survey, group discussions of about 10 persons
- Approx. 30 participants per city, between 20-30 years old
- Provision of information material; performance in national language
- Karlsruhe & Copenhagen exclusively higher education, mostly students with low income, childless
- Budapest broader composition of participants
- For the analysis we focus on "cycling", "meaning of the car", "vehicle sharing"

Socio-economic conditions Hungary:

- Hungary has been hit hardly by the economic crisis - difficult labour market conditions for young people

- Since 2006 rentals for housing in Hungary increased three to four times as much as European average

- Prices for public transport increased, today they are twice as high as in 2004

Transport situation Budapest:

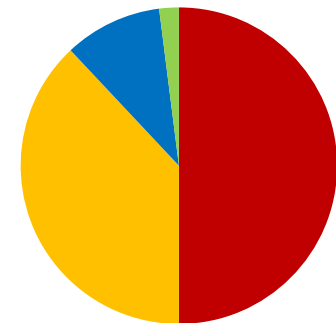Structural problems
(congestion, parking problems)

+

Investments of the EU
(cycling, traffic calming)

Modal Split 2010

Car	**50%**
PT	**38%**
Walking	**10%**
Cycling	**2%**

Budapest II

Cycling

- Europe's biggest Critical Mass rides (up to 80.000 riders)
- Ombudsman for bicycle affairs
- Vast majority of cyclists is young, green, cosmopolitan

By: JezW

Meaning of the car

- Transport strategy: improve infrastructure for transit traffic
- Not too much attention is paid to sustainability objectives

Vehicle sharing

- In 2011 no vehicle sharing system implemented
- Since 2014 Budapest has a bike sharing system

By: Trogain

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Budapest III – Interview Meetings

Meaning of the car

"if you build your career (…) and fortunately, your salary also increases, then, obviously, you want to take this opportunity [of buying a car]. I will be a real car driver"

Lack of appropriate alternatives
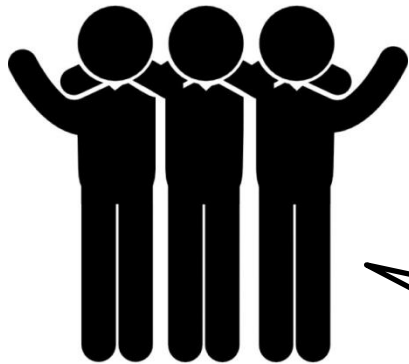
"The quality of the public transport vehicles is not acceptable, they are totally broken down".

Little confidence in sharing

"I can hardly imagine that car-sharing functions well"

Cycling as a countermovement

"Bicycle is much better, I have my own experiences. (…) Of course, it is stressful as well. I accept that not everybody is brave enough to do so."

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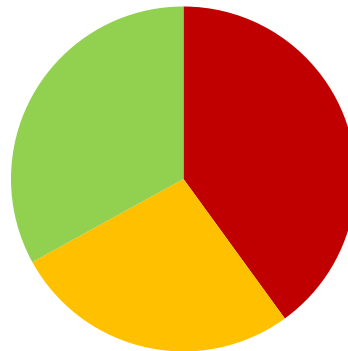Institute for Technology Assessment and Systems Analysis

Copenhagen I

Socio-economic conditions Denmark:

- Increasing ratio of students per capita

- Starting career not particularly difficult

- Since 2006 rentals for housing in Denmark increased slightly more than European average

- Price for purchasing private vehicles low compared to European average

Modal Split 2010

Car	**40%**
PT	**27%**
Cycling	**33%**
Walking	**n.a.**

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Copenhagen II

Cycling

- Political vision: Copenhagen as a city of cyclists
- Long tradition of cycling policy, defining the culture of the city
- Cycling is strategically communicated as desirable

Meaning of the car

- Political vision is to reduce car based transport to less than 1/3
- No significant resistance from Danish car owner organisation
- Car ownership is increasing, especially in families

Vehicle sharing

By: Ehedaya

- First large-scale bike sharing scheme, which came little by little to an end in 2012
- New, scheme since 2014
- City is willing to encourage car-sharing schemes

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Copenhagen III – Interview Meetings

Mobility should be quick and cheap

"I mean, what's the point in reducing CO_2, if it takes you three hours to get home from work."

Cycling as a popular alternative

"I guess one of the major advantages of taking the bike is that it will bring you from A to B faster than any other mode of transport"
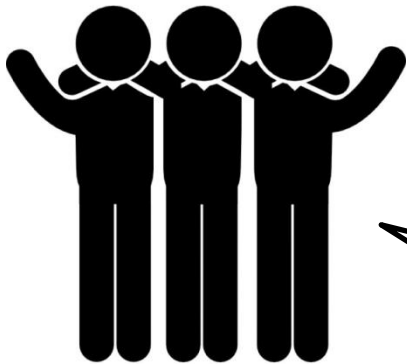
Car is not desirable in current life situation

"We don't need a car right now, but I'll bet you we'll have one in five years, because it's so nice, practical and convenient."

Restrictive transport policy as an opportunity

"if there were fewer cars and fewer parking spaces so all this space could be used for something else, right, that would give the city a tremendous dynamic"

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Socio-economic conditions Germany:

- Increasing ratio of students per capita

- Positive economic situation, regarding employment opportunities and GDP

- Rentals for housing in Germany slightly below European average

- Price for purchasing private vehicles corresponds to European average, prices for fuels and lubricants slightly below EU average

Modal Split Karlsruhe:
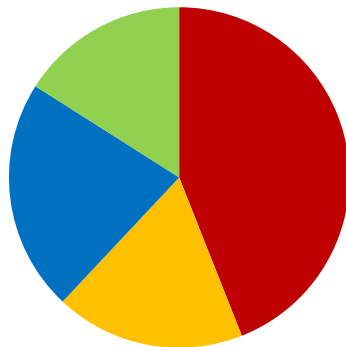
2002

2002		2012
44%	Car	34%
18%	PT	17%
22%	Walking	24%
16%	Cycling	25%
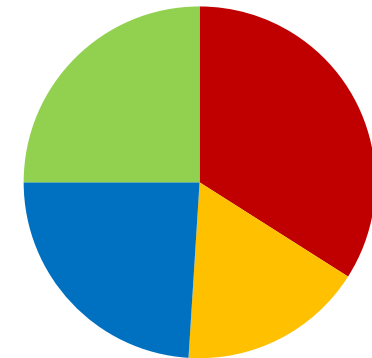
2012

Karlsruhe II

Cycling

- Political vision is to increase cycling
- 2011: Winner of the award "cycling friendly city" of the federal state Baden-Württemberg – goal is national award
- Bureaucratic language for communicating cycling ambitions

By: ka-news

Meaning of the car

- Traffic development plan does not mention need to promote car transport for inner city transport
- Car ownership decreases since 2006

By: dasfahrradblog

Vehicle sharing

- "Car sharing capital" – 4% of inhabitants are registered
- City is willing to encourage car-sharing schemes
- Bike-sharing scheme available

By: stadtmobil

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Karlsruhe III – Interview Meetings

Positive connotations in regard to alternative modes

"Perfect. I can't imagine it any better." [The public transport system]

"(…) But it would not occur to me to drive into the city center by car. This is all so easy to do by public transport and bicycle"

Different phases of life – different mobility needs

"If you have children, then travelling is a problem. I would consider myself to rather take the car, because it is...I mean you wouldn't have the stress with changing trains, getting off, especially with a pushchair and so on."

Sharing concepts well known

"I think it [car-sharing] is attractive because you can rent different types of cars. Well, I know people they use that, and they say […], that you are relatively flexible."

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Summary interview meetings

- Majority of participants does not uses cars as daily transport means
- Assessment of this situation depends on regional backgrounds:
  - Karlsruhe und Copenhagen:
    - Evaluate alternatives as equivalent (or even better) for their current phase of life
    - Owning a car is not necessarily seen as valuable, but getting children is connected to car based transport
    - Cycling is normal/ daily means of transport
  - Budapest:
    - Use of public transport due to lack of alternatives
    - Owning a car is (distant) dream of the future
    - Cycling culture as counterrevolutionary expression
- Means of transport should be fast, flexible and cheap to fit their needs
- Environmental aspects does not affect transport decisions
- Assessment of sharing depends on degree of experiences with it

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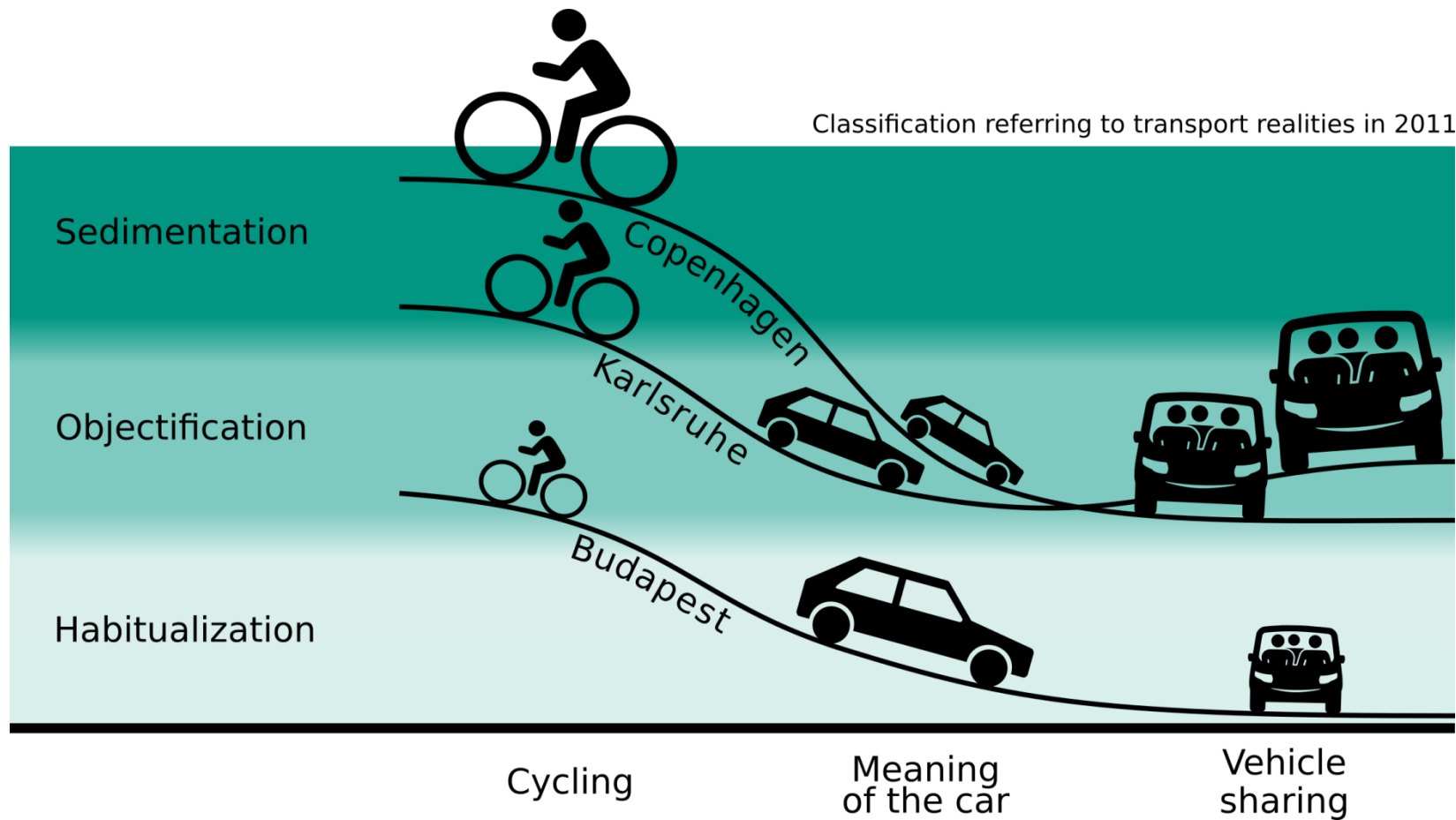
Drawing on institutional theory

Institutions = shared rules and understandings

Three stages of institutionalization (Tolbert and Zucker, 1999) :

1. <u>Habitualization:</u> Uncoordinated activities, small number of actors. **Very unstable configuration**, often disappearing with reassignment of first actors

2. <u>Objectification:</u> Development of some degree of social consensus among decision-makers, increasing adoption of (heterogeneous) actors. **Movement towards more stability**

3. <u>Sedimentation:</u> Survival of structures among generations of organizational members and adopters, structure is taken for granted and thus **relatively stable**

Institutions with short history and limited acceptance among a set of actors are more vulnerable to challenge and less apt to influence action (Barley and Tolbert, 1997)

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Classification referring to transport realities in 2011

Sedimentation

Objectification

Habitualization

Copenhagen

Karlsruhe

Budapest

Cycling

Meaning of the car

Vehicle sharing

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Conclusion

- There are enormous regional particularities regarding available transport options, infrastructure supply, actors, language used and central values

- For analysing transition processes, interplay between different elements of the transport system is crucial

- Degree of institutionalization could help in understanding stability as they influence perceptions and behaviours of actors
    - Established structures (e.g. cycling in Copenhagen) tend to survive across generations as they are taken for granted
    - Weak degree of institutionalization (e.g. vehicle sharing in Budapest) is more vulnerable to disappear

- Understanding rules that guide behaviours might indicate to pathways to overcome unsustainable system structures and practices

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