



Mobility is freedom

Mind-Sets FINAL CONFERENCE

Brussels, 22 May 2017

Laurent Francks



This project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 640401.

Economic approach to mobility

- Assumption of rationality
- User of transport system:
 - Chooses car(s) that best satisfy his needs (with given budget)
 - Chooses transport mode and route that minimize generalized cost of transport (financial cost + opportunity cost of time)
- Policy implications:
 - Equilibrium concept: transport demand will be distributed over network so that no one can gain by deviating from route
 - People's observed behaviour as basis for social cost-benefit analysis
 - Reaction to policy instruments



Criticisms

- Activity-based modelling shifts focus from models that are trip-based, to models that build on activities that generate trips
- Hybrid Choice Models: identify observable variables that correlate attitudes, beliefs and social norms with impact on travel behaviour
- More fundamental questioning of economic approach:
 - real humans cannot consider all possible alternatives and corresponding outcomes => bounded rationality
 - enrich economic models with more realistic behavioural assumptions (“behavioural economics”)

Policy issues in transport

- externalities are exacerbated because people make choices against their own interest (“status quo bias”, unrealistic assessment of life cycle costs of cars, health impacts of mode choices)
- behavioural biases may hinder effectiveness of price instruments
- improve effectiveness of so-called “soft” policy measures



Examples of potential

- Increasing salience of variable costs of cars
- Route planners could propose “sustainable” travel modes as **default** option.
- Express information so that people can translate it in benefits and costs
- Use of social networking (for instance in combination with car sharing, workplace and school travel plans) and “collaborative filtering” could encourage modal shift



What about ICT?

- Several cognitive processes that underpin travel decisions are now delegated to ICT => obsolescence of much of existing research
- New research questions:
 - choices are affected by defaults or by valence framing
 - central role in social learning, in building virtual communities and in development of collaborative filtering.
 - overcome one of the main shortcomings of existing behavioural research:
 - *focus on small scale laboratory settings with small stakes, with questionable generalisability*
 - *absence of large scale, randomized field experiments in real life circumstances*





!



Mobility is freedom



This project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 640401.