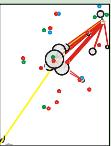


Seminar on Longitudinal Methods
for Understanding and Modelling Travel Behaviour

What can we learn from mobility biographies?

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Outline

1. Introduction: Habits and travel behaviour changes
2. Mobility biographies: theoretical framework
3. Case study: An explorative study with parents of kindergarten children
 - Methodology
 - Which key events are important?
 - How do key events affect travel behaviour?
 - How do mobility biographies develop over time?
4. Conclusions

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1. Introduction: Habits and travel behaviour changes

- Travel behaviour is mainly habitual
→ travel behaviour change is a difficult task
(e.g., information and communication strategies may fail if habits are too strong)
- Habit: Repeated performance of behavioural sequences by individuals
(social psychology: the choice of behaviour without deliberation)
- Reasons for the use of habits:
 - Search costs for alternatives are too high
 - Expected gains of alternatives are too uncertain
 - Repetition of past behaviour is easier and less risky
- When do habits change?

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2. Theoretical background:
Life course approach for travel behaviour

- explain behaviour by its continuity over life time and by specific events that involve major changes in other domains of life
- life course is subdivided into a series of life course trajectories: events and stages between events in certain domains of life

— / / — Events in a Career

- Objective: discover and analyse interactions between different life course trajectories

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Mobility biographies

The diagram shows three stacked rectangular boxes representing different domains, each containing a list of variables and a timeline at the bottom labeled "Time". Arrows point from the top of one box to the bottom of the next, indicating a flow or relationship between them.

- LIFE STYLE DOMAIN:** Demographic Career, Professional Career, Leisure Career, ???
- ACCESSIBILITY DOMAIN:** Employment Location, Residential Location, Leisure and Other Locat, ???
- MOBILITY DOMAIN:** Car Ownership, Seasonicket, Holiday Travel, Daily Travel

Source: Lautenbacher 2003, partly adapted from Salomon 1983

— / / — Events in a Career

3. Case Study:
An explorative study with parents of kindergarten children

Methodology

- qualitative, retrospective interviews (N=20)
- with parents of young children (3-6 years old) in Leipzig
- many potential key events
("family", residential relocation, 1st job, ...)
- for future travel decisions: „window of opportunities“ is still relatively open

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Content of the qualitative interviews

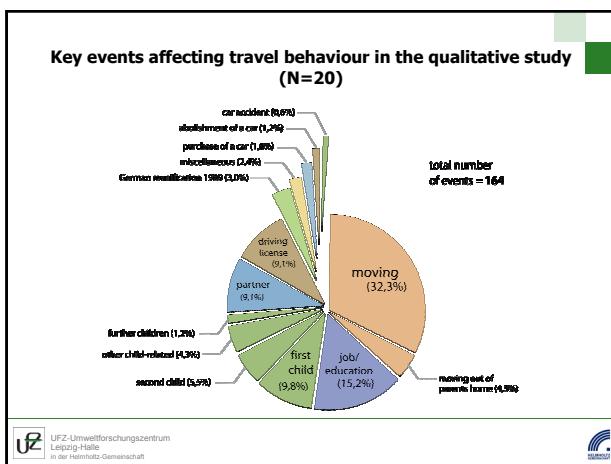
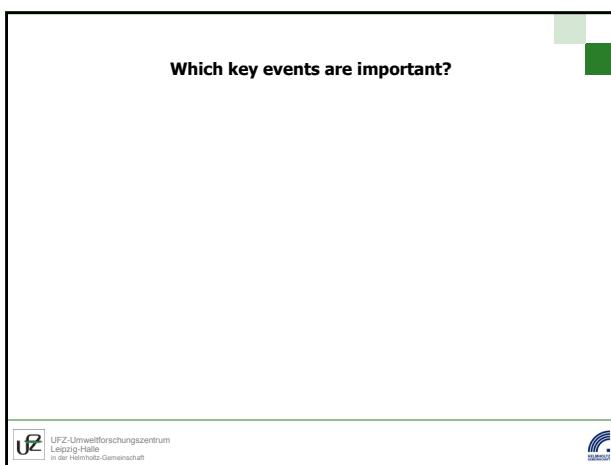
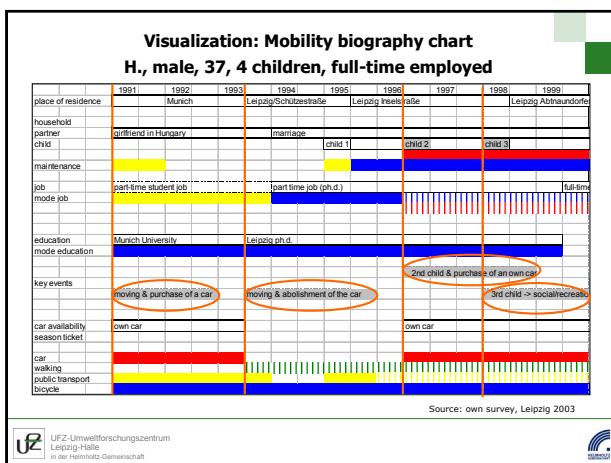
- Attitudes towards transport modes
 - Activity space and mode usage
 - Key events affecting travel patterns (modes, distances, activities) & explanations
 - Socio-demographic characteristics
- Additionally: 2-week trip diary (actual behaviour)

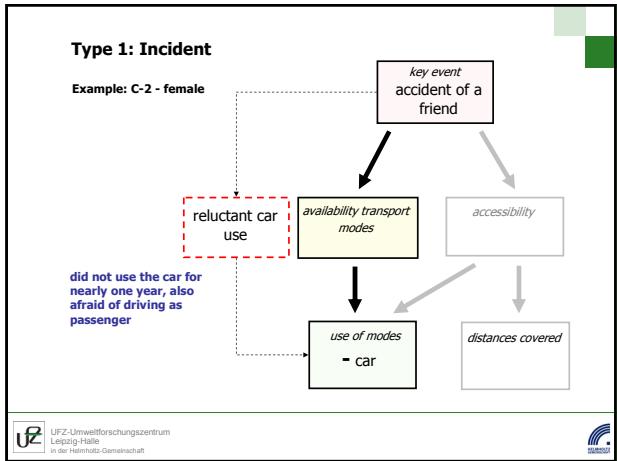
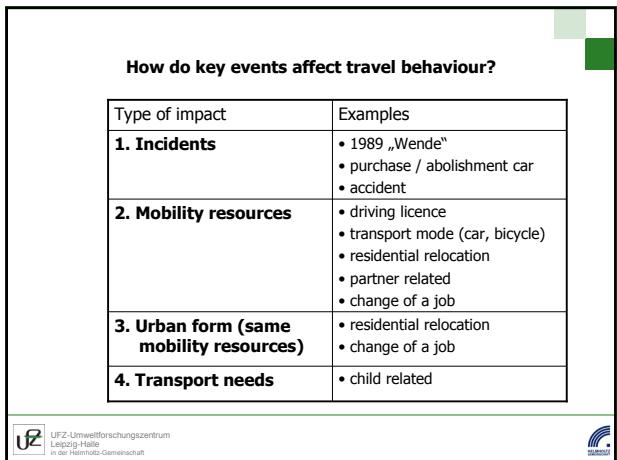
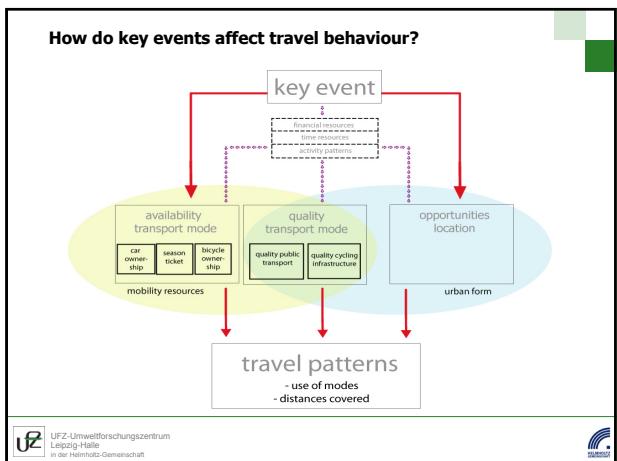
Socio-demographic characteristics of respondents

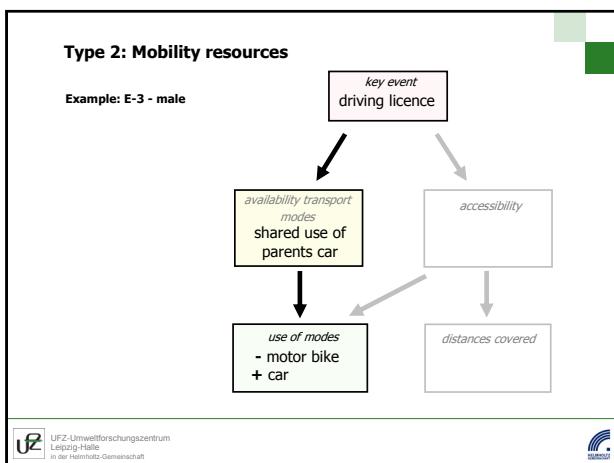
		N
age (years)	25 – 30	5
	31 – 35	9
	36 – 45	6
sex	male	4
	female	16
number of children in household	1	6
	2	10
	> 2	4
family status	married / same household with partner	15
	single	5

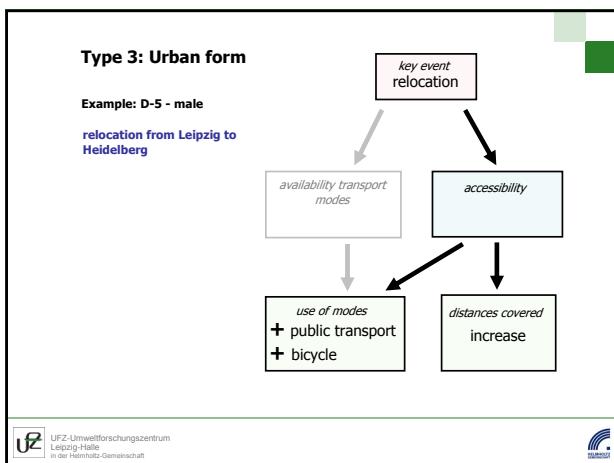
Analysis of the qualitative interviews

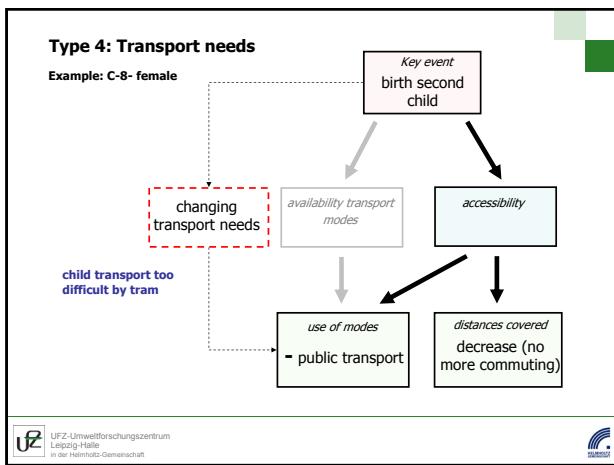
- grounded theory
- Atlas TI software
- visualization and figures







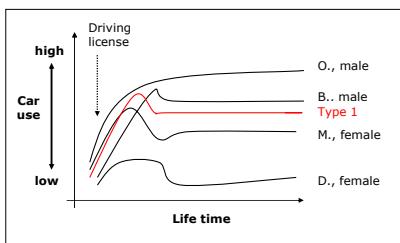




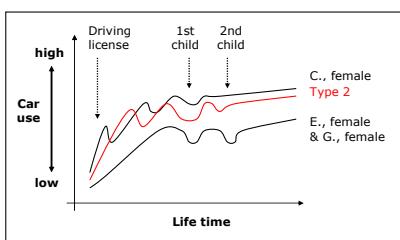
How do mobility biographies develop over time?

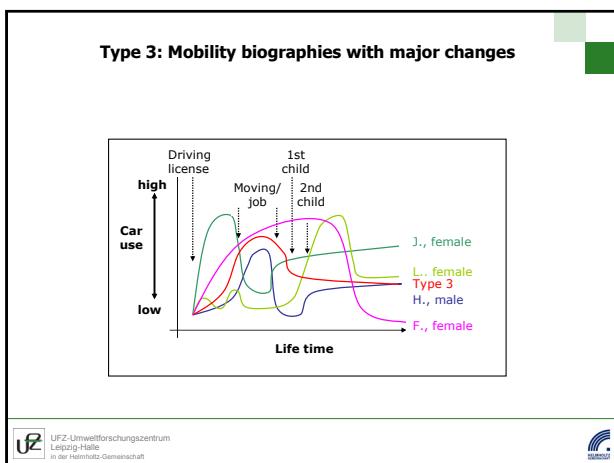
An explorative typology for the "car use biography"

Type 1: Mobility biographies without major changes



Type 2: Mobility biographies with stepwise adoption to car use





- 4. Conclusions 1**
- Residential relocations, driving license, job, child and partner related account for more than 90% of key events
 - The key events affect travel behaviour by four types: mobility resources, urban form, transport needs and incidents
 - Types of mobility biographies for car use were identified, however:
 - car use varies for all three types over lifetime
 - one peak of car use after the receipt of a driving licence (→ emotional ties)
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- 4. Conclusions 2**
- Should key events be the target of policies for affecting travel behaviour?
 - Is it possible to change mobility biographies?
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