Mobility cultures in transition
Infrastructures, policies and everyday practices

Prof. Dr. Henrike Rau
LMU München | mobil.LAB

14/09/2020
I Introduction

• Mobility – key feature of everyday life in (late) modern societies

• BUT:
  • Rising greenhouse gas emissions from transport sector
  • Accelerating competition for space and time in expanding cities
  • Increased vulnerability of transport systems, e.g. flooding, pandemics, poor maintenance of existing infrastructure

→ Urgent need for sustainability transition – but lack of progress
Reasons for lack of progress

• Overreliance on technological innovation (‘techno-optimism’)
  • e.g. new engine technology, autonomous driving etc.

• Overemphasis on **responsibility of individuals** to ’make the right choices‘ (in a system geared towards unsustainable mobility)

• Mobility-related **rebound effects** at different scales (from local to global)

• ’What is mobility for?’ – poor understanding of social and cultural reasons for mobility and resulting ’consumption of distance‘ --> need for culturally sensitive approaches to mobility research
II Researching mobility cultures

- **Diverse definitions** that connect (infra)structure and human agency

- Mobility-cultural empirical work has sought to captured meanings, emotions, and societal norms
  - e.g. Fincham 2007, Aldred and Jungnickel 2014

- Governance and policy as major influencing factors
  - e.g. Dowling and Kent 2015, Rau et al. 2018
II Researching mobility cultures

1. **Normative approaches** that call for paradigmatic shift away from fossil-fueled mobility cultures  
   e.g. Rammler 2009, 2017; Keichel & Schwedes 2013, Canzler et al. 2018, Hoor 2020

2. **Systematic comparisons** of variations in everyday mobility at different scales  
   e.g. Wulforst et al. 2013, Götz et al. 2016, Kesselring & Wulforst 2016, Haustein & Nielsen 2016,  
   Klinger 2017, Bamberg et al. 2020

3. **Meaning-oriented concepts** of mobility cultures  
   e.g. Rau 2008, Aldred and Jungnicken 2014, Glaser 2016

Source: Mögele & Rau (2020)
II Researching mobility cultures

• Conceptual efforts to **reconnect production and consumption of mobility** and shift focus towards *what mobility is for* enables engagement in everyday practices that, in turn, fulfil various social and cultural functions.

• Mobility cultures as “**shared meanings and materials that underpin the production of mobility-related goods and services** and, by extension, the **reproduction of diverse mobility practices** that make up the “consumption of distance’” (Mögele and Rau 2020: 17)
III Changing mobility cultures

• ’Mobility cultures‘ as potential conceptual backdrop to sustainable mobility initiatives

• ‘A deeper cultural understanding [of mobility] can fundamentally help to show latent change and design potential and increase the effectiveness of various traffic planning measures to achieve traffic policy goals.’ (Hoor 2020: 3)

• BUT: assumption that divergent and potentially conflicting mobility cultures can be reconciled, integrated and managed
Sustainable mobility as 'clash of cultures'

MOBILITÄT

Verkehrsexperte: "Die Autofrage ist der Kulturkampf der Zukunft"

Nachhaltiger Verkehr ist mit privaten Autos mit Verbrennungsmotor nicht möglich, sagt der Mobilitätsexperte Stephan Rammler. Was aber kommt nach dem Auto?

Fahrrad gegen Auto: "Kulturkampf" um Berlins Straßen

Wie kann Verkehr in einer Großstadt anders funktionieren als heute? Vor allem mit Blick auf die Umwelt? In Berlin startet Rot-Rot-Grün ein spannendes Experiment. Und polarisiert mächtig.


Source: Der Standard, 6.11.2019

Source: https://www.aachener-zeitung.de/bildergalerien/proteste-bei-auto-messe-iaa_bid-45838043#2
Sustainable mobility as ‘clash of cultures’

, [... ] der Verkehrsalltag ist nach wie vor von den Ergebnissen einer jahrzehntelangen aktiven Autoförderung geprägt. [...] die in Beton und Asphalt geronnene Realität der autogerechten Stadt [ist] eines der Haupthindernisse für eine echte Verkehrswende


BUT:

• viewing mobility as inherently cultural practices shifts attention to both material artefacts and social meanings and norms that support the hegemony of the car

• what is automobility for? facilitates plethora of social practices can other transport modes do the same?
IV The rise of cycling

• Cycling as **counter-hegemonic urban mobility culture** requires more than a change in infrastructure and policy to flourish.

• Cycling citizenship – “distinctive perspective on the proper relation of the individual to their environment, privileging views ‘from outside’ the motorcar” Aldred 2010.

• Example: **Non-cyclists in Germany** often come from non-cycling families and social environments and do not view cycling as a viable form of mobility that meets their social needs.
RadAktiv: Researching non-cyclists

- BMVI-funded research (2018-2020) on **non-cyclists in Germany** – people who cycle less than once a month
- Intended to inform German government’s pro-cycling policy goals (NRVP)
- **Focus on social aspects of cycling and their dynamics over time**
  - e.g. impact of life events and 'mobility milestones' on people’s propensity to use the bike
- BUT: complementary view of infrastructural features that either help or hinder cycling

- [https://www.researchgate.net/project/RadAktiv](https://www.researchgate.net/project/RadAktiv)
RadAktiv project design

Module 1
Barriers to cycling
01.2018 – 08.2018

- Literature review
- Expert interviews
- Interviews with non-cyclists

Module 2
Typology of non-cyclists
09.2018 – 08.2019

- National representative survey (Germany)

Module 3
Development of practice guidelines
09.2019 – 06.2020

- Screening of existing measures
- Workshops covering concrete steps and measures
- Development of guidelines
Baseline
Bicycle ownership and use in Germany

Households without a bicycle

Share of non-cyclists

Sources: infas, DIW (Hg.) (2004): Mobilität in Deutschland 2002; infas, DLR (Hg.) (2010): Mobilität in Deutschland 2008; infas, DLR (Hg.) (2019): Mobilität in Deutschland 2017
Sample

Sources: infas, DLR (Hg.) (2019): Mobilität in Deutschland 2017; RadAktiv survey 2019, n=5002
RadAktiv results

Source: RadAktiv survey 2019; n=998/748/1594/1662
RadAktiv results

Source: RadAktiv survey 2019; n=2518 & 2514 (cyclists); n=2258 & 2208 (non-cyclists) – cf. Mahne-Bieder et al. 2020
RadAktiv results

A bicycle is well suited for...

<table>
<thead>
<tr>
<th></th>
<th>work trips. cyclists</th>
<th>utility trips. cyclists</th>
<th>leisure trips. cyclists</th>
<th>work trips. non-cyclists</th>
<th>utility trips. non-cyclists</th>
<th>leisure trips. non-cyclists</th>
</tr>
</thead>
<tbody>
<tr>
<td>fully agree</td>
<td>25,3%</td>
<td>25,2%</td>
<td>38,0%</td>
<td>50,9%</td>
<td>32,6%</td>
<td>50,8%</td>
</tr>
<tr>
<td>agree</td>
<td>20,2%</td>
<td>35,9%</td>
<td>50,2%</td>
<td>23,2%</td>
<td>10,6%</td>
<td>10,1%</td>
</tr>
<tr>
<td>disagree</td>
<td>29,0%</td>
<td>27,1%</td>
<td>10,6%</td>
<td>15,3%</td>
<td>25,5%</td>
<td>31,8%</td>
</tr>
<tr>
<td>fully disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: RadAktiv survey 2019; n=2312 & 2615 & 2615 (cyclists); n=1925 & 2080 & 2128 (non-cyclists), Mahne-Bieder et al. 2020
Summary

• Policy efforts to date to promote cycling in Germany have been largely geared towards those who already cycle

• BUT: Non-cyclists tend to have little or no experience of 'cycling culture' (family, peers and friends, wider social environment) → cycling not seen as viable mobility option

• Experimentation as a promising tool to foster cycling culture
  • e.g. guided cycling trips for beginners and 'returnees', opportunities to test bicycles, temporary bike lanes and other cycling infrastructure

• Also: significant cross-national variations → need for additional research Haustein et al. 2019
Conclusion | discussion

• Successful mobility transition (‘Verkehrswende’) requires significant cultural change → concept of ‘mobility cultures’ ideally suited to emphasise this

• Need for greater understanding of what mobility is for across science-policy-society spectrum

• Current emphasis on (technical) innovation to shift mobility cultures towards greater sustainability → more emphasis on exnovation, immobility and the revival of dormant mobility practices?
Bibliography I


Bibliography II


• Kesselring, S., & Wulforst, G. (2016). Perspectives on Sustainable Mobility in Metropolitan Regions: Shaping Mobility Cultures. In Sustainable Mobility in Metropolitan Regions (pp. 201-221). Springer VS, Wiesbaden.


Bibliography III