

# Mobility cultures in transition

Infrastructures, policies and everyday practices

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# 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
  - e.g. Deffner et al. 2006, Rau 2008, Klinger et al. 2013, Kuhnimhof & Wulfhorst 2013, Klinger & Lanzendorf 2015, Hoor 2020, Mögele & Rau 2020
- Mobility-cultural empirical work has sought to capture 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. Wulfhorst et al. 2013, Götz et al. 2016, Kesselring & Wulfhorst 2016, Haustein & Nielsen 2016, Klinger 2017, Bamberg et al. 2020

3. **Meaning-oriented concepts** of mobility cultures

e.g. Rau 2008, Aldred and Jungnickel 2014, Glaser 2016

## 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‘



Source: [https://www.deutschlandfunkkultur.de/proteste-gegen-automesse-iaa-pkw-orientierung-der-staedte.1013.de.html?dram:article\\_id=458843](https://www.deutschlandfunkkultur.de/proteste-gegen-automesse-iaa-pkw-orientierung-der-staedte.1013.de.html?dram:article_id=458843)

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?

Source: *Der Standard*, 6.11.2019

Source: [https://www.aachener-zeitung.de/bildergalerien/proteste-bei-auto-messe-iaa\\_bid-45838043#2](https://www.aachener-zeitung.de/bildergalerien/proteste-bei-auto-messe-iaa_bid-45838043#2)

## 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: Rhein-Neckar-Zeitung, 22.02.2017, [https://www.rnz.de/wissen/umwelt\\_artikel,-Umwelt-Fahrrad-gegen-Auto-Kulturkampf-um-Berlins-Strassen-\\_arid,256891.html](https://www.rnz.de/wissen/umwelt_artikel,-Umwelt-Fahrrad-gegen-Auto-Kulturkampf-um-Berlins-Strassen-_arid,256891.html)





# 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‘

Source: Canzler & Radtke 2019, Bundeszentrale für politische Bildung, <https://www.bpb.de/apuz/298748/verkehrswende-als-kulturwende>

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?

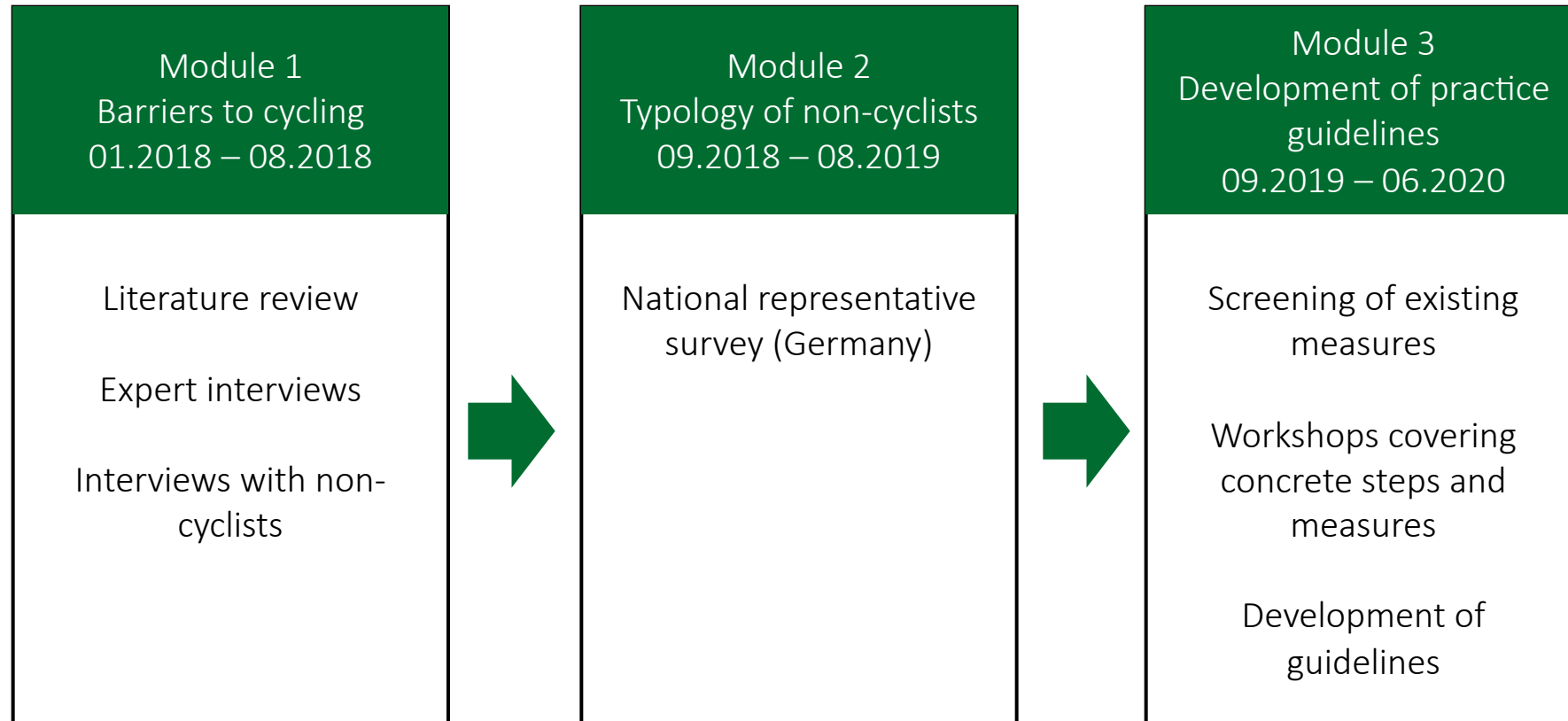
# IV The rise of cycling

- 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>

# RadAktiv project design



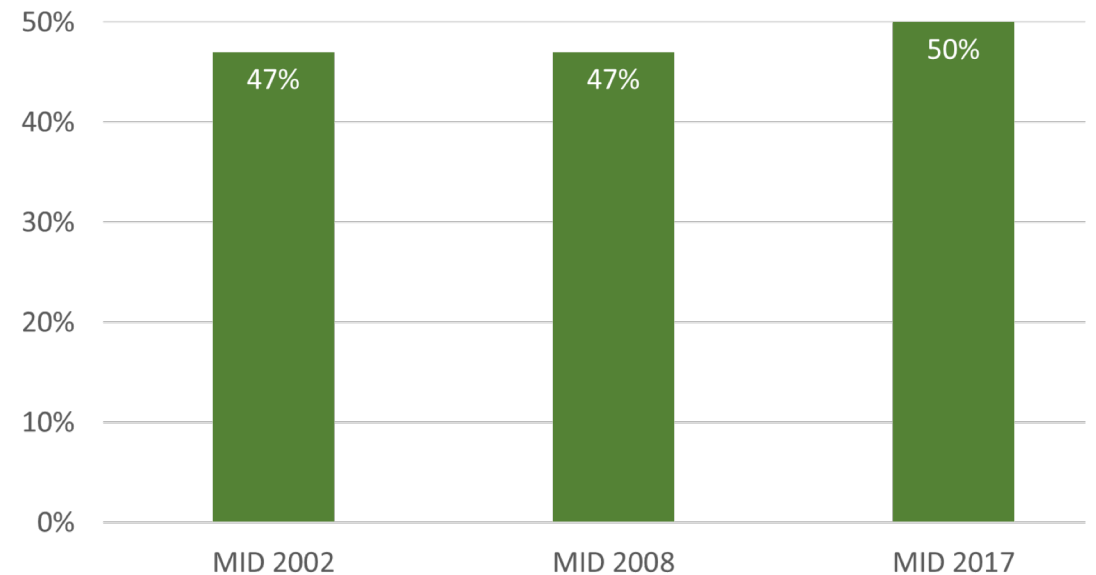
# Baseline

Bicycle ownership and use in Germany

## Households without a bicycle

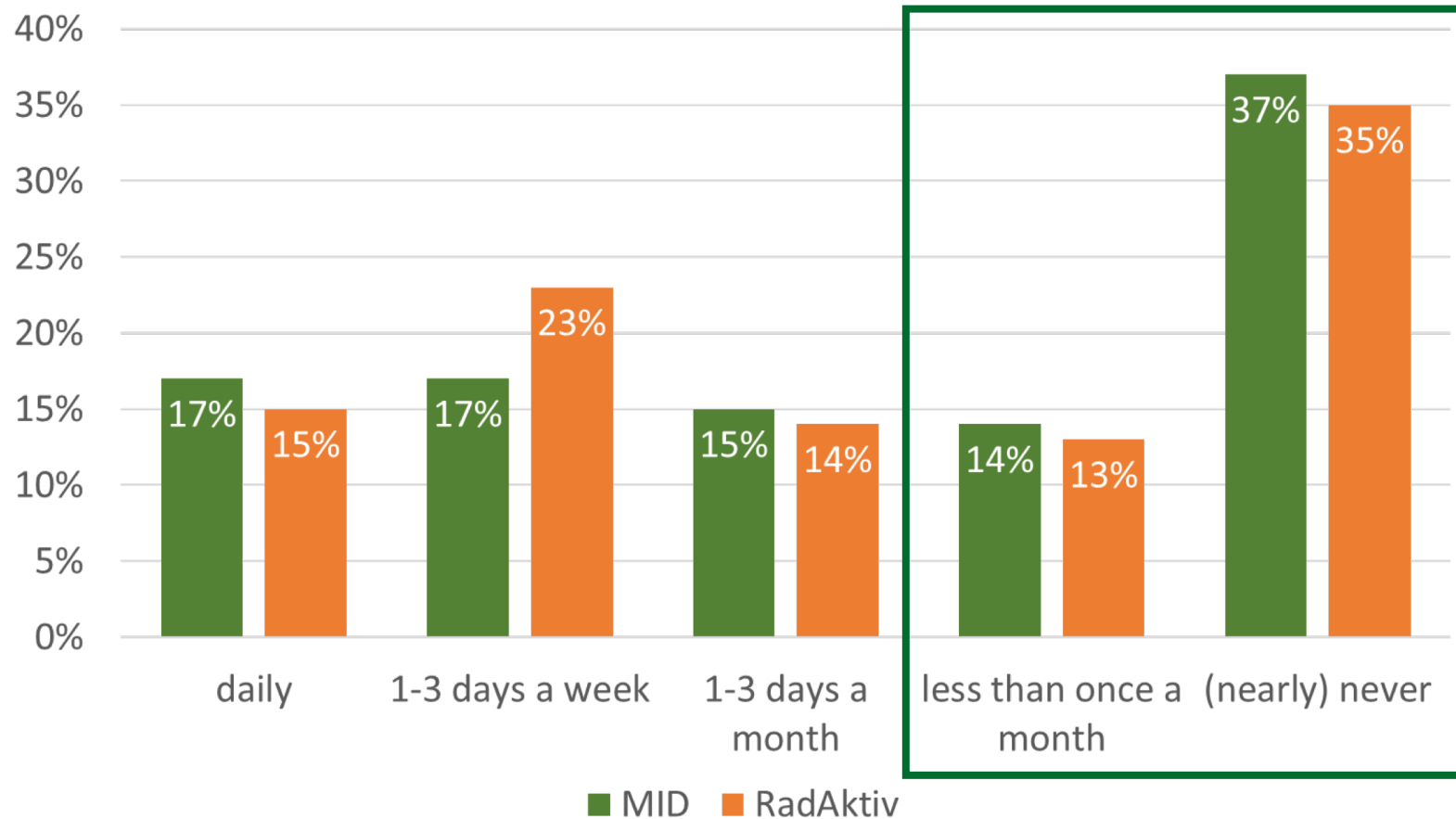


## Share of non-cyclists

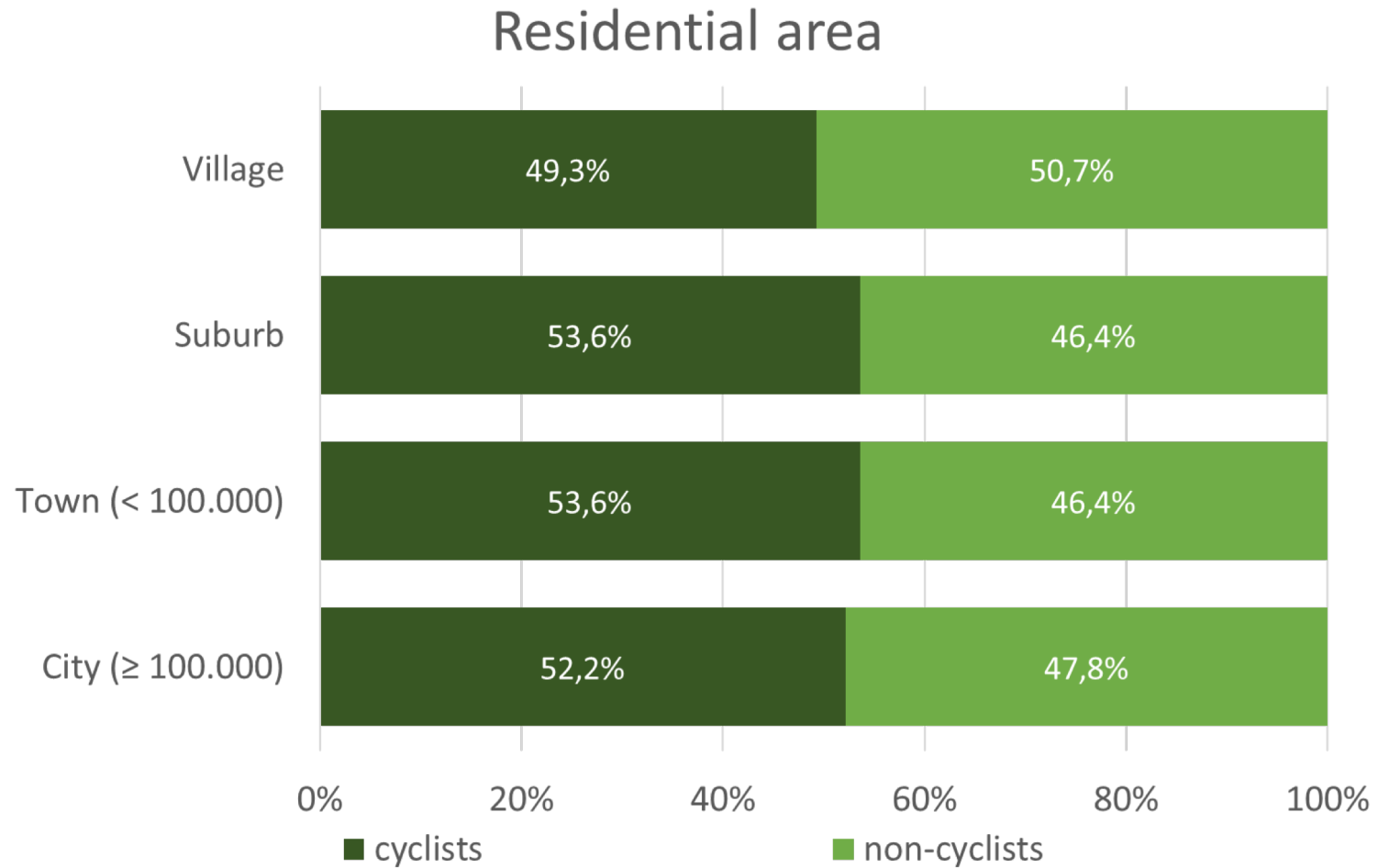


# Sample

## Frequency of use

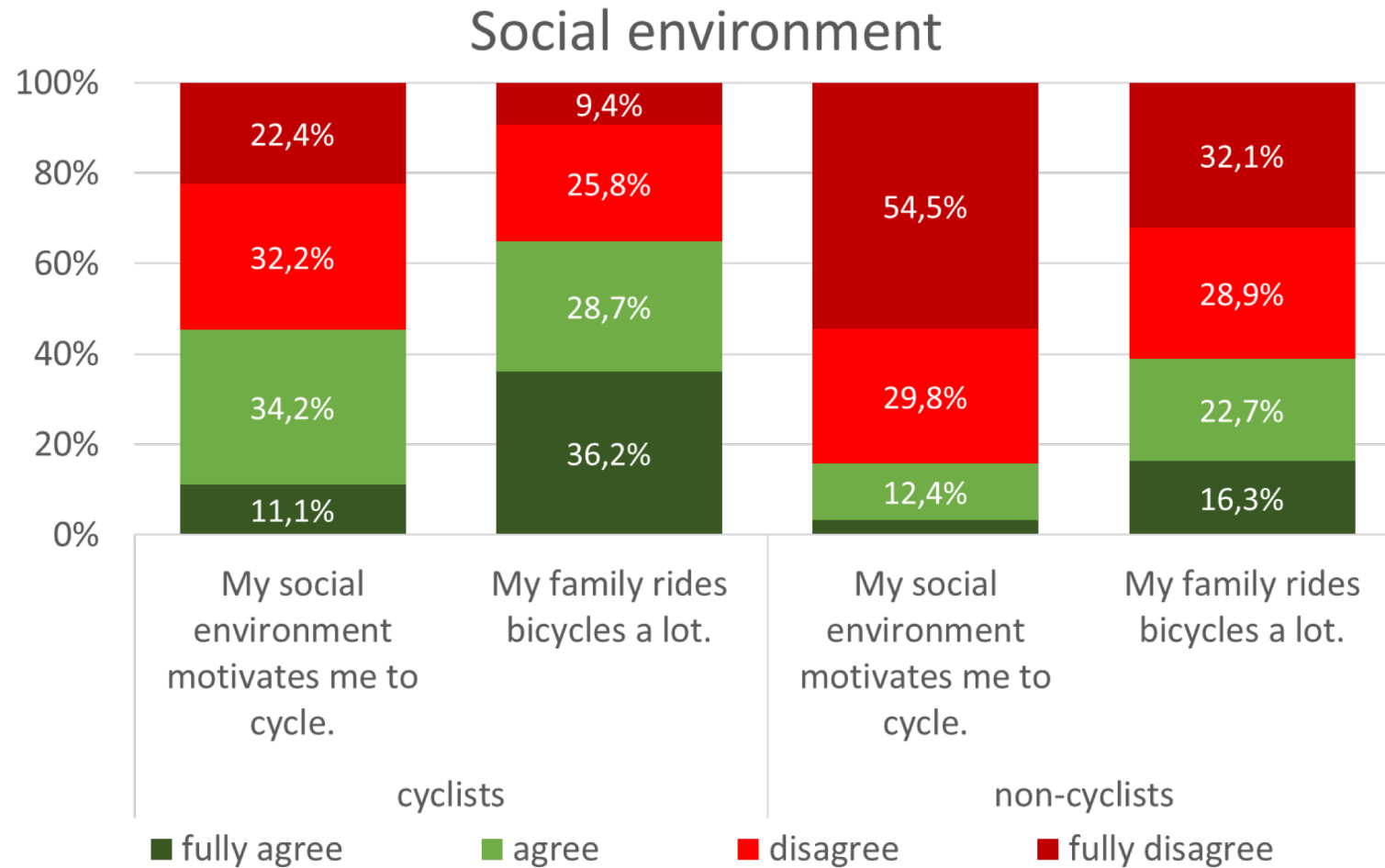


# RadAktiv results



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

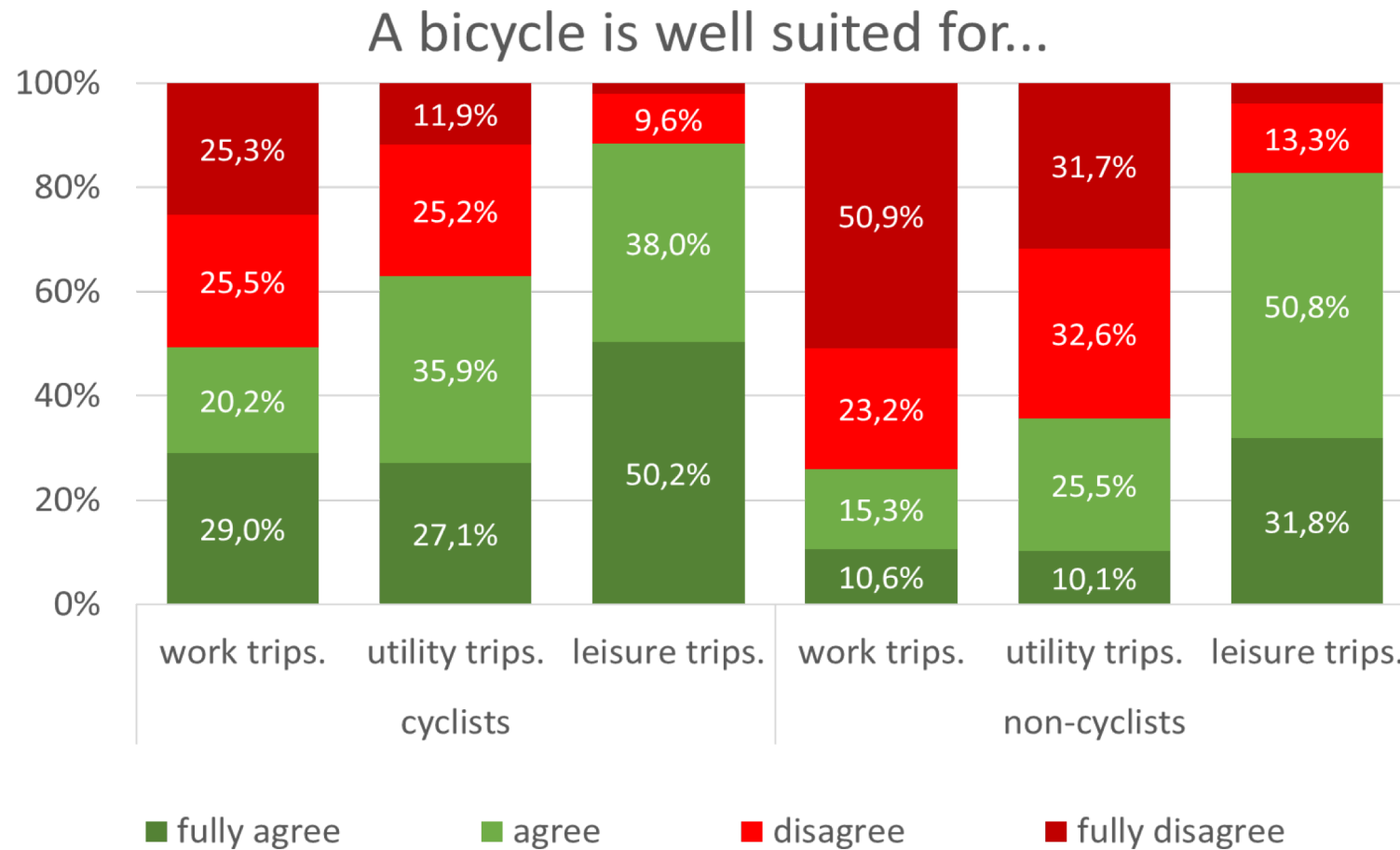
# RadAktiv results



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



# RadAktiv results



# 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 Haustein et al. 2019 → **need for additional research**

# 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

- Aldred, R. (2010). 'On the outside': constructing cycling citizenship. *Social & Cultural Geography*, 11(1), 35-52.
- Aldred, R., & Jungnickel, K. (2014). Why culture matters for transport policy: the case of cycling in the UK. *Journal of Transport Geography*, 34, 78-87.
- Bamberg, S., Rollin, P., & Schulte, M. (2020). Local mobility culture as injunctive normative beliefs—A theoretical approach and a related measurement instrument. *Journal of Environmental Psychology*, 101465.
- Canzler, W., Knie, A., Ruhrort, L. and Scherf, C. (2018). *Erloschene Liebe? Das Auto in der Verkehrswende: Soziologische Deutungen (Extinct Love? The Car in the Traffic Turn: Sociological Interpretations)*. Bielefeld: Transcript.
- Deffner, J., Götz, K., Schubert, S., Potting, C., Stete, G., Tschann, A., & Loose, W. (2006). Entwicklung eines integrierten Konzepts der Planung, Kommunikation und Implementierung einer nachhaltigen, multioptionalen Mobilitätskultur. Schlussbericht. Frankfurt.
- Dowling, R., & Kent, J. (2015). Practice and public–private partnerships in sustainable transport governance: The case of car sharing in Sydney, Australia. *Transport policy*, 40, 58-64.
- Fincham, B. (2007). "Generally Speaking People are in it for the Cycling and the Beer': Bicycle Couriers, Subculture and Enjoyment." *The Sociological Review* 55 (2): 189–202.
- Glaser, H. (2016). Zum kulturellen Bedeutungswandel des Verkehrs in der Menschheitsgeschichte. In *Handbuch Verkehrspolitik* (pp. 55-76). Springer VS, Wiesbaden.
- Götz, K., J. Deffner, and T. Klinger. 2016. "Mobilitätsstile und Mobilitätskulturen: Erklärungspotentiale, Rezeption und Kritik (Mobility Styles and Mobility Cultures: Explanatory Potentials, Reception and Criticism)." In *Handbuch Verkehrspolitik (Handbook Transport Policy)*, edited by O. Schwedes, W. Canzler, and A. Knie, 781–804. Wiesbaden: Springer VS.

# Bibliography II

- Haustein, S., & Nielsen, T. A. S. (2016). European mobility cultures: A survey-based cluster analysis across 28 European countries. *Journal of Transport Geography*, 54, 173-180.
- Haustein, S., Kroesen, M., & Mulalic, I. (2019). Cycling culture and socialisation: modelling the effect of immigrant origin on cycling in Denmark and the Netherlands. *Transportation*, 1-21.
- Hoor, M. (2020). Mobilitätskulturen: Über die Notwendigkeit einer kulturellen Perspektive der integrierten Verkehrsplanung (No. 2020 (1)). IVP-Discussion Paper.
- Keichel, M., and O. Schwedes. 2013. "Einleitung: Plädoyer für eine neue Mobilitätskultur. Das Elektroauto (Introduction: Plea for a New Mobility Culture)." In *Das Elektroauto (The Electric Car)*, edited by M. Keichel, and O. Schwedes, 1–8. Wiesbaden: Springer Fachmedien.
- Kesselring, S., & Wulfhorst, G. (2016). Perspectives on Sustainable Mobility in Metropolitan Regions: Shaping Mobility Cultures. In *Sustainable Mobility in Metropolitan Regions* (pp. 201-221). Springer VS, Wiesbaden.
- Klinger, T., Kenworthy, J. R., & Lanzendorf, M. (2013). Dimensions of urban mobility cultures—a comparison of German cities. *Journal of Transport Geography*, 31, 18-29.
- Klinger, T., & Lanzendorf, M. (2016). Moving between mobility cultures: what affects the travel behavior of new residents? *Transportation*, 43(2), 243-271.
- Kuhnimhof, T., & Wulfhorst, G. (2013). The reader's guide to mobility culture. In *Megacity Mobility Culture* (pp. 55-64). Springer, Berlin, Heidelberg.

# Bibliography III

- Mahne-Bieder, J., Popp, M. & Rau, H. (2020). Welche Barrieren und Hindernisse haben Nicht-Radfahrende in Deutschland? Eine vergleichende Betrachtung und Typisierung. In A. Appel, J. Scheiner & M. Wilde (eds.) *Mobilität, Erreichbarkeit, Raum*. Wiesbaden: Springer Nature.
- Mögele, M., & Rau, H. (2020). Cultivating the “car state”: a culturally sensitive analysis of car-centric discourses and mobility cultures in Southern Germany. *Sustainability: Science, Practice and Policy*, 16(1), 15-28.
- Rammler, S. 2009. “Möglichkeitssinn für eine postfossile Mobilitätskultur (Sense of Possibility for a Post-Fossil Mobility Culture).” In *Mobilität bewegt Schule: Das niedersächsische Curriculum Mobilität an schulischen und außerschulischen Lernorten (Mobility Moves Schools: The Lower Saxony Curriculum Mobility at School and Out-of-School Places of Learning)*, edited by E. Curdt, H. Roselieb, and C. Wiesmüller, 79–84. Bielefeld: Bertelsmann.
- Rammler, S. (2017). *Volk ohne Wagen: Streitschrift für eine neue Mobilität (Society without Cars: Pamphlet for a New Mobility)*. Frankfurt am Main: Fischer.
- Rau, H. (2008). Environmental arguing at a crossroads? Cultural diversity in Irish transport planning. *Environmental argument and cultural difference: Locations, fractures and deliberations*, 95-124.
- Rau, H., Hynes, M., & Heisserer, B. (2016). Transport policy and governance in turbulent times: Evidence from Ireland. *Case studies on transport policy*, 4(2), 45-56.
- Temenos, C., Nikolaeva, A., Schwanen, T., Cresswell, T., Sengers, F., Watson, M., & Sheller, M. (2017). Theorizing mobility transitions: an interdisciplinary conversation. *Transfers*, 7(1), 113-129.
- Wulfhorst, G., J. Kenworthy, S. Kesselring, T. Kuhnimhof, M. Lanzendorf, and R. Priester. 2013. “Mobility Cultures in Megacities. Results from a Global Study.” Paper presented at World Conference on Transport Research, Rio de Janeiro.