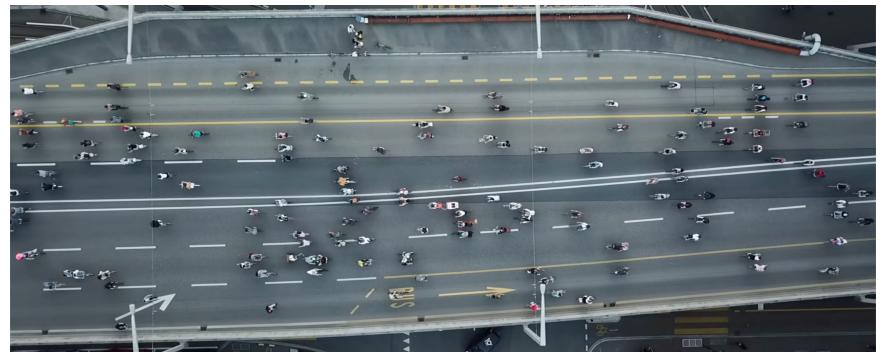
#### CYCLING PRACTICES, PLANNING, AND POLITICS IN SWITZERLAND

#### **Prof Dr Patrick Rérat**

#### Academic Observatory for Cycling and Active Mobilities (OUVEMA) University of Lausanne



30-03-2023 | Institute for Transport Planning and Systems – IVT, ETHZ

#### ACADEMIC OBSERVATORY FOR CYCLING AND ACTIVE MOBILITIES (OUVEMA)

- Founded in 2020
- Research areas
  - Practices and behaviours
  - Policies and politics
  - Planning and built environment
  - Health
- Links with civil society
- Scientific committee of 18 professors
  - Geography, history, law, medicine, operation management, political science, psychology, public health, sociology, tourism, etc.

#### www.unil.ch/ouvema



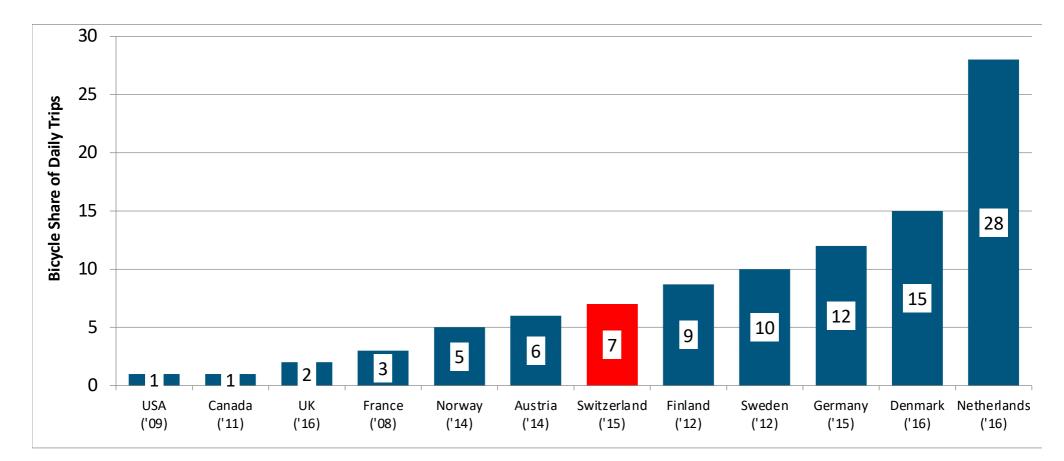
# INTRODUCTION

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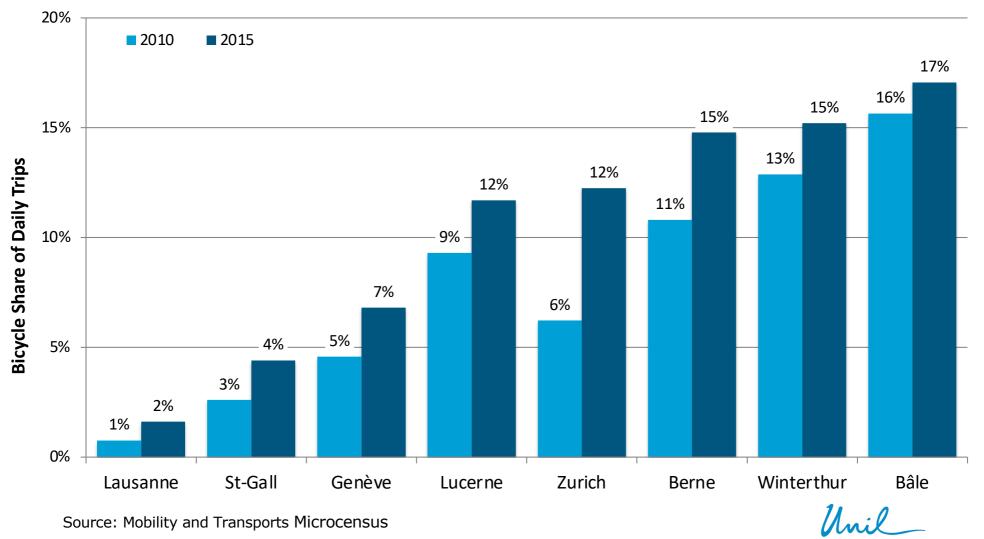
# **MODAL SHARE OF THE BIKE**

(% OF DAILY TRIPS; BETWEEN 2009 2016)



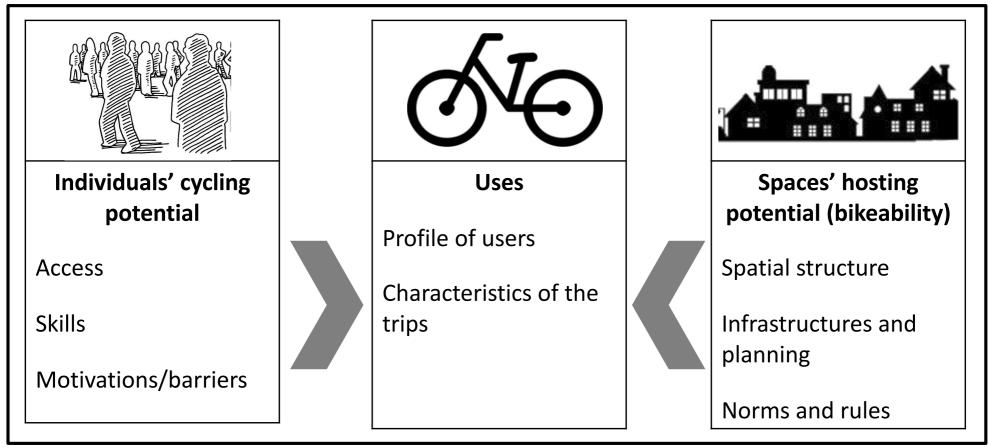
Source: Buehler Ralph (2018), Bicycling levels and trends in Western Europe and the USA in Rérat Patrick (ed.), La renaissance du vélo, GéoAgenda, 1.

# EVOLUTION OF THE MODAL SHARE OF THE BIKE (MAIN CITIES)



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# SYSTEM OF VELOMOBILITY



Main influence: Urry (automobility), Kaufmann (motility), Cresswell (constellation of mobility)

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Rérat, Patrick. « The Rise of the E-Bike: Towards an Extension of the Practice of Cycling? » *Mobilities* 16, n° 3: 423-39. https://doi.org/10.1080/17450101.2021.1897236.

### **CYCLING PRACTICES**

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# **CYCLING TO WORK**

Bike to work scheme: More than 50,000 participants (four-person teams)

To cycle to work as much as possible in May and/or June

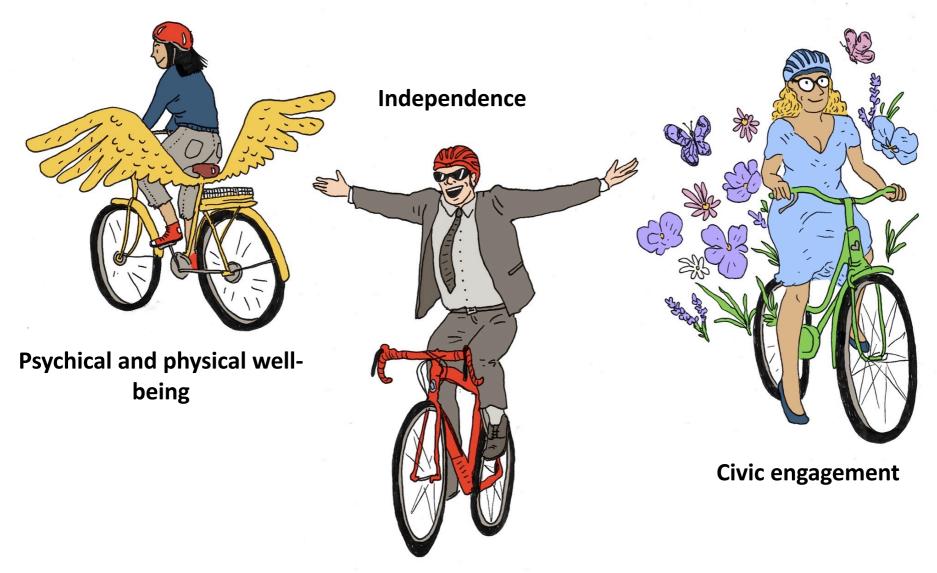
#### **Participants**

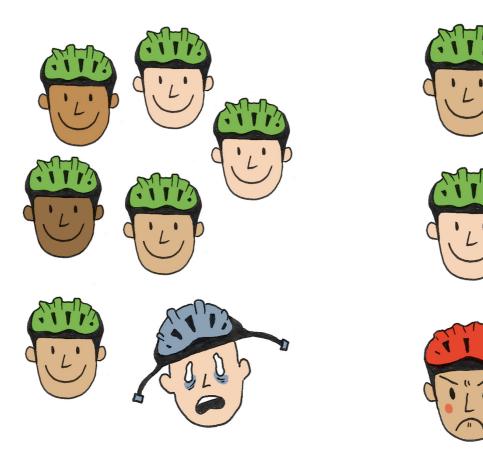
- Not representative of all cyclists (employed people, medium-sized or big firms, utility cycling, etc.)
- A wide range of profiles (practice, equipment, etc.)
- N=14,000

Rérat P., 2021, Cycling to Work. An Analysis of the Practice of Utility Cycling, Springer



## **MOTIVATIONS TO CYCLE TO WORK**





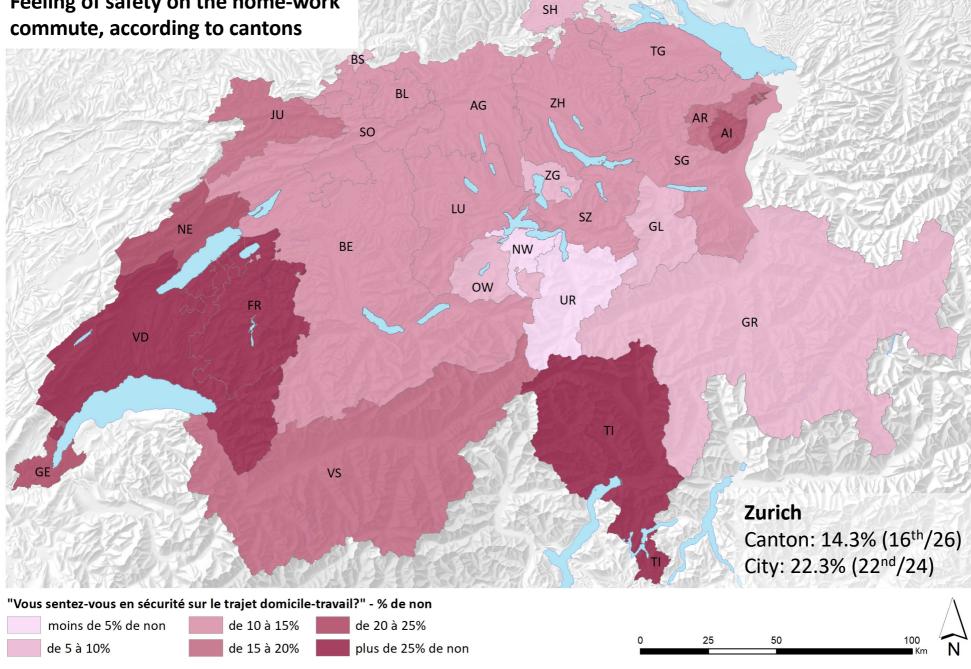
**14%** do not feel safe on their commuting journey

**32%** do not feel respected by other road users

Maril

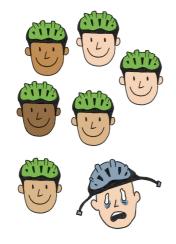
Rérat P., 2019, Cycling to Work: Meanings and Experiences of a Sustainable Practice. *Transportation Research Part A* 123: <u>https://doi.org/10.1016/j.tra.2018.10.017</u>.

#### Feeling of safety on the home-work



Rérat P., 2021, Cycling to Work. An Analysis of the Practice of Utility Cycling, Springer

## **CYCLING TO WORK**



Safety

**Experiences** 



Well-being







Independence



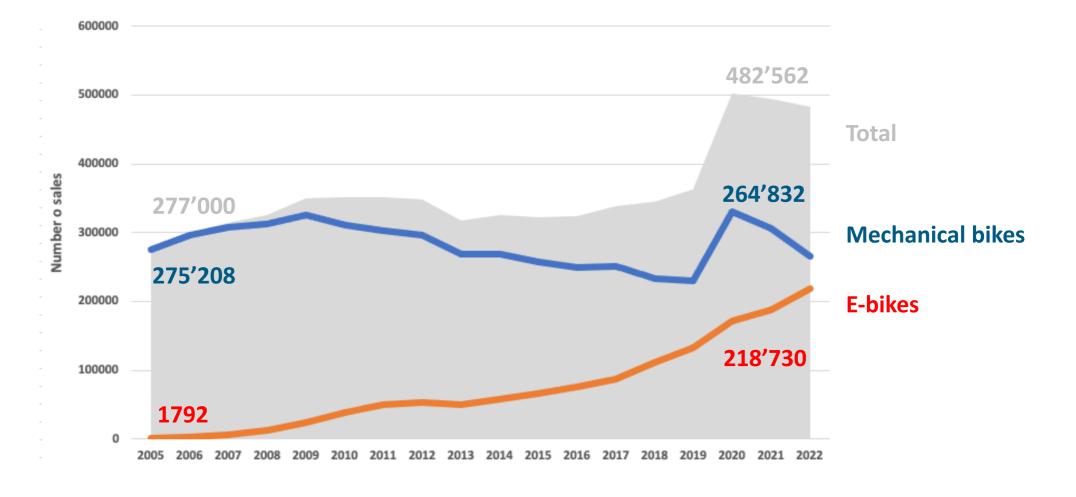
#### Segregation of cycle lanes

#### Efficiency and coherence (network)



Rérat P., 2019, Cycling to Work: Meanings and Experiences of a Sustainable Practice. *Transportation Research Part A* 123: <u>https://doi.org/10.1016/j.tra.2018.10.017</u>.

### THE RISE OF THE E-BIKE



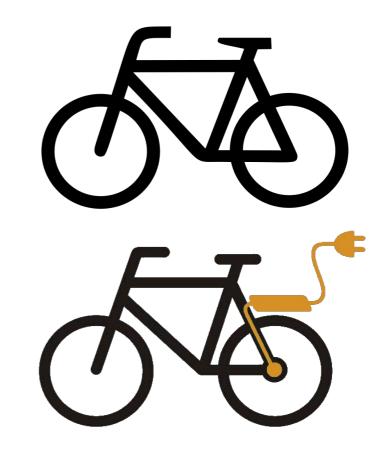
#### Source: VeloSuisse

11 ... : 0

Marincek D. & Rérat P., 2022, E-bikes: Expanding the practice of cycling?. In: Routledge Companion to Cycling, pp. 263-271, DOI 10.4324/9781003142041-34

# THE RISE OF THE E-BIKE

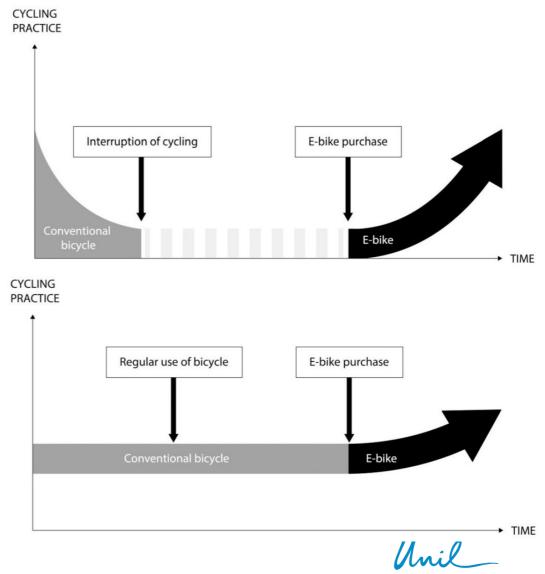
- The public is becoming younger and more feminine
- Longer distances, "flattened" topography
- Extends cycling to suburban and periurban areas
- Less present in cities (parking problems?) but more used
- Cargo function (children)



## **E-BIKE & CYCLING TRAJECTORIES**

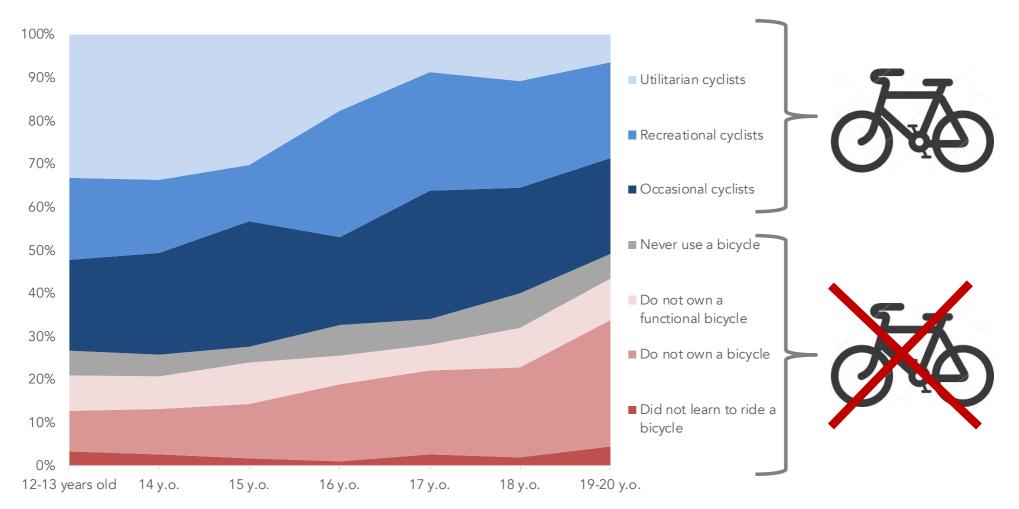
Allows to RESTART but also to CONTINUE the practice of cycling

Restorative vs resilient trajectories



Marincek D. & Rérat P., 2021, From Conventional to Electrically-Assisted Cycling. A Biographical Approach to the Adoption of the E-Bike. *International Journal of Sustainable Transportation* 15, https://doi.org/10.1080/15568318.2020.1799119.

# **CYCLING TRAJECTORIES AND YOUTH**



#### Case study: Yverdon, n=1,339

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Schmassmann A., Baehler D., Rérat P., forthcoming, The Contrasted Evolution of Cycling during Youth. Determinants of Bicycle Ownership and Use, International Journal for Sustainable Transportation

### VELOPOLITICS

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# THE "BIKE INITIATIVE"

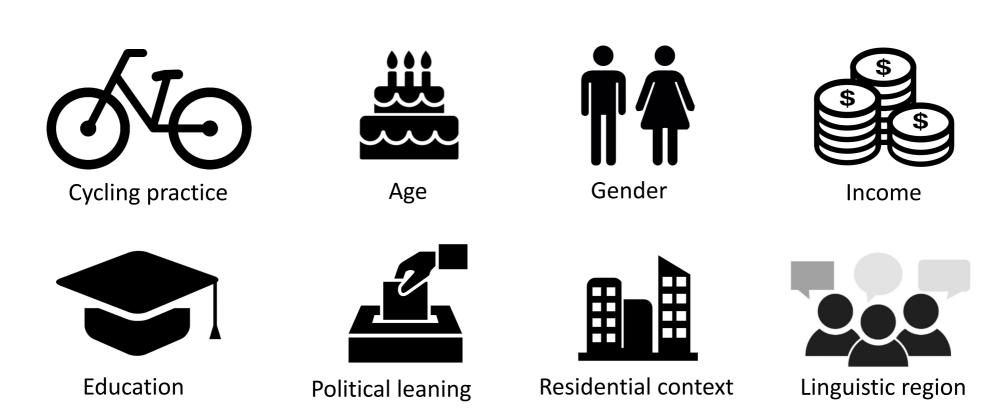
GENEVA

 2015: launch of an initiative to add the promotion of cycle paths in the constitution (Art. 88 on Footpaths and hiking trails)

- 2016/17: debates at the Government & Parliament
  - Counter-proposal without constraints
  - Withdrawal of the initiative
- Vote in September 2018 => 73.6% yes



#### WHO VOTED YES (MORE THAN AVERAGE)?



#### Source: VOTO survey, 6 weeks after the vote (n=1,500), logistic regression

Rérat P. & Ravalet E., 2022, The Politics of Velomobility: Analysis of the Vote to Include Cycling in the Swiss Constitution. *International Journal of Sustainable Transportation*, https://doi.org/10.1080/15568318.2022.2068388.

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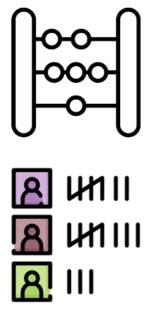


#### Source: VOTO survey, 6 weeks after the vote (n=1,500)

Mail

Rérat P. & Ravalet E., 2022, The Politics of Velomobility: Analysis of the Vote to Include Cycling in the Swiss Constitution. International Journal of Sustainable Transportation, https://doi.org/10.1080/15568318.2022.2068388.

#### **EFFECTS OF INFRASTRUCTURE**





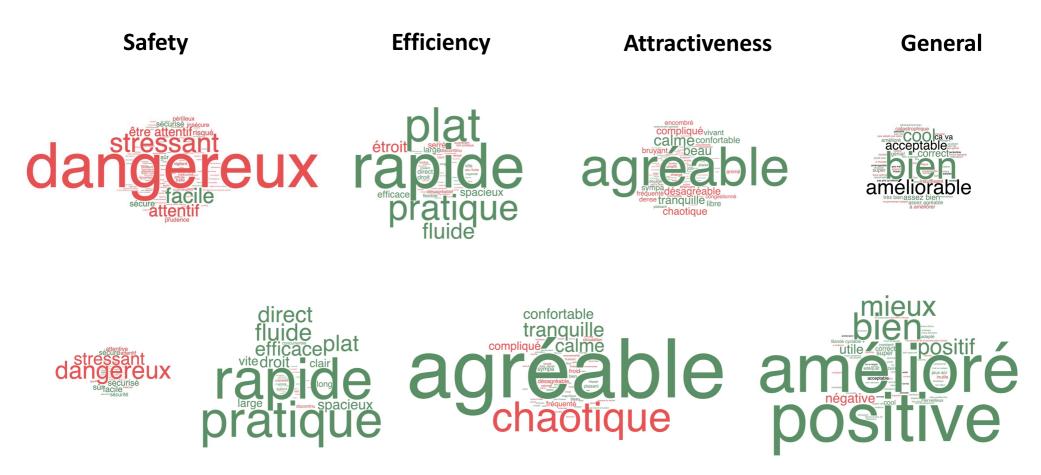


Fribourg Low cycling town (2%) Fieldwork: before/after the new cycle lane Unil

| | | UNIL | Université de Lausanne

Schmassmann A. & Rérat P., 2023, Quels sont les effets d'un nouvel aménagement cyclable? L'exemple du boulevard de Pérolles à Fribourg, Etudes urbaines 21 8, https://www.unil.ch/igd/rapports-etudes-urbaines

### **EFFECTS OF INFRASTRUCTURE**



- Positive adjectives from 46% to 72%
- Negative adjectives relating to the lack of safety: from 34% to 15%

Schmassmann A. & Rérat P., 2023, Quels sont les effets d'un nouvel aménagement cyclable? L'exemple du boulevard de Pérolles à Fribourg, Etudes urbaines 22 8, https://www.unil.ch/igd/rapports-etudes-urbaines

# **ROAD SAFETY AND SOCIAL NORMS**

Aldred 2021

	Individual approach	Global approach
Cycling	Individual choice	Important part of the transport system
Source of danger	Cycling/cyclists (victim blaming?)	Infrastructures (and all road users that are perfectible)
Solutions	Vulnerable users: passive (helmet, etc.) and active (behaviour) safety	Infrastructures (8-80), rules

#### Example



## CONCLUSIONS

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## **MESSAGES ON CYCLING**

- Not only a movement (getting from A to B) but also meanings and experiences (+/-)
- A life-long practice (to attract & to maintain)
- A political object that is contested in a context of hegemony of the car (spaces and social norms)
- More popular, more urban, more utilitarian but needs to be taken care of (infrastructures and legitimisation; system of velomobility)

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