

BIKE COMMUTING

A TYPOLOGY OF CYCLISTS ACCORDING TO THEIR MOTIVATIONS

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<http://spokanepublicradio.org/post/bike-work-week-2016>

2nd Swiss Mobility Conference | Lausanne

Unil

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CONTEXT

Promoting cycling?

- Transition to a low carbon mobility
- Public health
- Congestion, etc.

What do we actually know about the practice of cycling?

Conventional knowledge/models not sufficient. (...) Determinants of cycling: built and natural environment, socio-economic variables, psychological factors (incl. attitudes) and aspects related to cost, time, effort and safety. (Heinen et al. 2010)

Sedentary understandings: mobility either as meaningless or as the practical outcome of "rational" decision makers (time and distance) (Spinney 2009)

Heterogeneity of meanings within cycling (Cox 2005)

BIKE TO WORK

Organised since 2005 by PRO VELO

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, experience, equipment, etc.)



The poster features a central illustration of a woman with pink hair riding a blue bicycle. The background is a vibrant blue. In the top right corner, a circular logo contains the text 'BIKE TO WORK'. Below it, the text 'CHALLENGE 2017 REGISTER YOUR TEAMS NOW!' is written in bold white and black letters. A black banner on the left side of the cyclist says 'Win prizes worth CHF 110,000' and 'biketowork.ch'. At the bottom left, there are icons for the App Store and Google Play. The bottom of the poster lists sponsors: 'A campaign from: PRO VELO SWITZERLAND', 'Supported by: VELOPLUS, SWISS POST, PANTAP, and swissenergy'. A small 'unil.ch' logo is visible in the bottom right corner of the poster.

METHODOLOGY

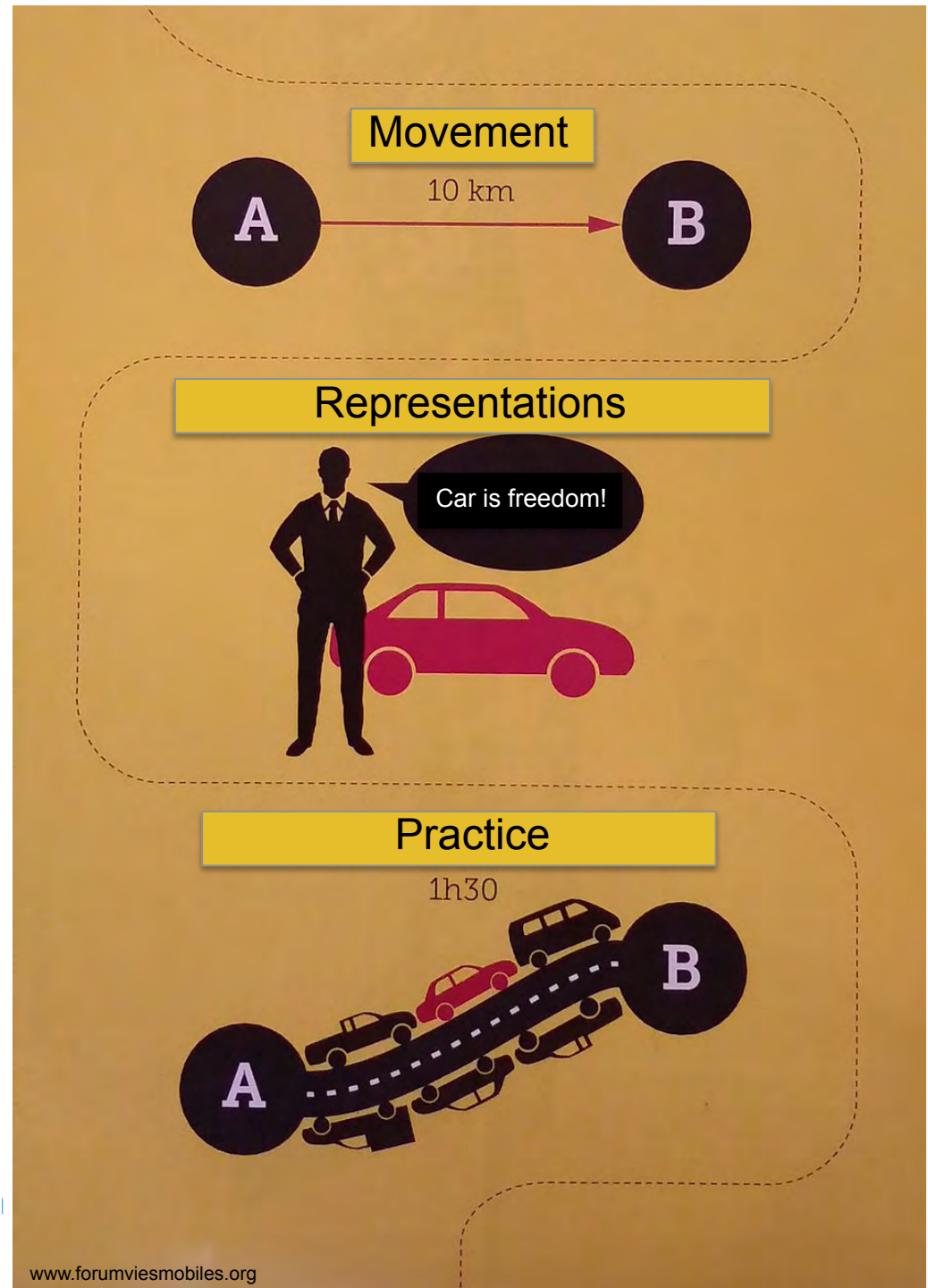
- On-line questionnaire sent to the participants in bike to work 2016
- Questions on
 - Profiles
 - Mobility practices
 - Equipment
 - Skills and competences
 - **Motivations**
 - Barriers
 - Bikeability of the commuting trip (infrastructure, safety issues, etc.)
 - Participation in bike to work (motivations, impacts, etc.)
 - ...
- 13,744 valid questionnaires (response rate of 30%)
- Many comments (e.g. 2,600 on motivations)

THEORETICAL FRAMEWORK

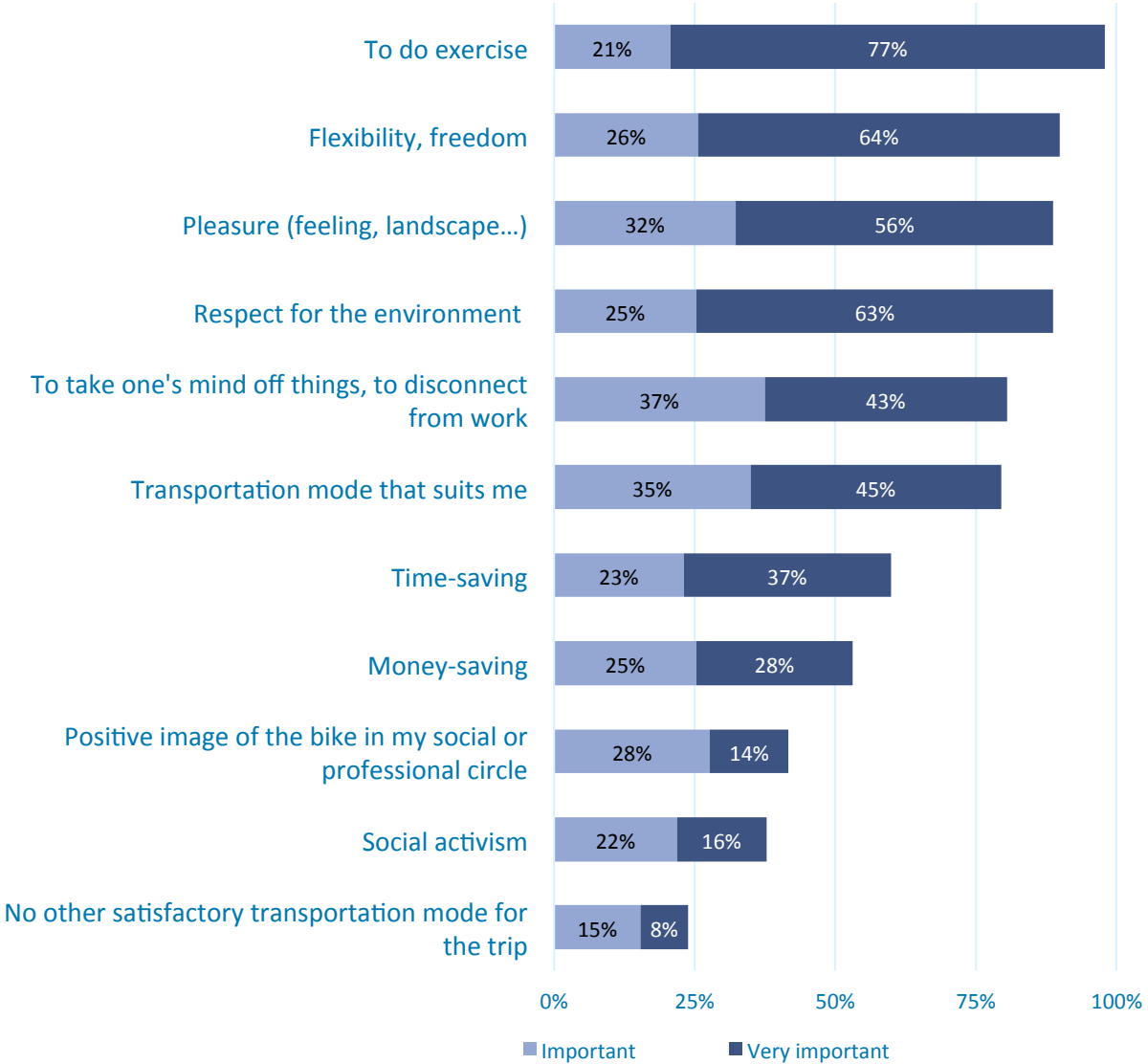
Why do people cycle to work?

Conceptualisation of mobility (Cresswell 2010)

- Movement
- Representations
- Embodied practice



MOTIVATIONS TO CYCLE TO WORK



Three main axes

Method: Principal component analysis

- Well-being
- Civic engagement
- Independence



“WELL-BEING” I

To do exercise with a variable intensity

- “If you rest, you rust!”
- “As I suffered a torn cruciate ligament, I can’t run anymore. The bike, even electric, enables me to do sport at least a little.”
- “I often combine the trip back home with a long training route (instead of 8km, maybe 50-60km) so that I can squeeze in an endurance training while there is still daylight.”

To maximize time by combining exercise and utilitarian trips

- “I combine trip to work and sport, so that I don’t have to use the lunch break or the evening to do sport. So it remains more time for the family.”
- “It is difficult to find time to do sport. Using my compulsory trips to cycle is an appreciated time-saving trick in my schedule, even if I had to spend more time to make the trip in comparison to train or car.”

“WELL-BEING” II

Pleasure

- “Biking is simply great fun!”
- “I often make detours of more than 1 hour going to work just for pleasure.”
- “In the morning moving in the fresh air is the first highlight of the day!”
- “VELOLOVE!”

Disconnection from work

- “While I am on my way back home with my bike, I can “stamp” a whole series of issues in the pedals so that I don’t bring them with me. I arrive happier at home.”
- “I could not use the car or buses every day (...), I would get depressed. The bike is a synonym of freedom and physical well-being but most of all it allows me to forget worries and negativity.”

“INDEPENDENCE”

Freedom, flexibility, speed of the bike

- “Uncomplicated and flexible. I can quickly and simply stop at any shops, without looking for and paying for a parking space.”
- “It is possible to park everywhere, to do quickly some shopping or anything on the way...”
- “Biking is simple and should stay so. I don't do it for convictions, neither for political or other “deep” reasons.”

Perceived constraints of the car and public transports

- “A car is always stuck in traffic jam. By bike I get everywhere without delay.”
- “I cycle because of laziness. All other means of transport are too constraining. Car: search for parking space, lines of vehicles, peak hours. Public transport: to respect the time table (or to miss the bus), to change, no offer during the whole night. Bike: door-to-door and round-the-clock!”

“CIVIC ENGAGEMENT”

Environmental awareness and convivial rhythm

- “Although I am not a sporty person at all, I love the bike. I like to do something for the environment, for the quality of life in a city, for our health, for the feeling and the sharing. Unfortunately I understand that I put my own life at high risk while cycling (and this despite the helmet, the bright colours clothes and the lamps).”
- “I hope that the bike will be used more in the future, that we will breathe better, for us but mainly for our kids. To ride a bike allows to rediscover a speed of life adapted to a human biological rhythm... All the contrary of the car that transforms the human being into a stressed person.”
- “The increasing mobilisation through cars, motobikes and trucks bothers me greatly. Against this I would like to set an example with respect to my environment and say: it goes as well like this. To go everywhere with muscle power, so we are free, independent and stay fit. To be outside, to feel the sun and the rain on the skin, to let the wind whistle in the ears, to grope around in the fog. This is life!”

The logo for Unil, featuring the word "Unil" in a blue, cursive script font.

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FOUR TYPES OF CYCLISTS

	% of sample	Well-being	Civic Engagement	Independance
Active cyclists	29%	+	0	--
Civic cyclists	17%	--	+	0
Individualist cyclists	14%	+	--	+
Enthusiastic cyclists	40%	+	+	++

+ more than average | - less than average | 0 similar to average

Method: cluster analysis (Ward)

WHO ARE THE FOUR TYPES OF CYCLISTS? (LOGISTIC REGRESSION)

Profile

- Sex
- Households (with/without children)
- Typology of municipalities (urban/suburban/rural)

Equipment

- Access to car (yes or no/on demand)
- Public transport ticket (yes/no/half-fare card)

Practice

- Seasonality (only in summer/all year round)
- Length of the commuting trip by bike (quintiles)
- Use of the bike (frequency)

WHO ARE THE FOUR TYPES OF CYCLISTS? (LOGISTIC REGRESSION)

Active cyclists

- Overrepresentation: men; with children; suburban/rural areas; car owners; no season ticket
- Cycle less regularly, more in summer, on longer distances

Civic cyclists

- Overrepresentation: men; urban areas
- Cycle on shorter distances

Individualist cyclists

- Overrepresentation: childless households; urban areas; season ticket holders
- Commute most of the time by bike

Enthusiastic cyclists

- Overrepresentation: women; urban areas; no car
- Cycle all year round, not on very long distances, most of the time to work

CONCLUSIONS

Motivations to commute by bike

- Well-being | Independence | Civic engagement

Four types of cyclists according to their motivations

- Active | Civic | Individualist | Enthusiastic

Promoting cycling

- Movement: to improve infrastructures (directness, safety, etc.)
- Meanings: to put forwards environmental and (physical and psychical) health issues
- Embodied experience: to stress on cycling as a special moment enabling to disconnect in an increasing connected world