



swiss mobility conference

6th edition

September 14-15

EPFL, Lausanne

swiss mobility conference

September 14-15, 2023

École Polytechnique Fédérale de Lausanne

■ **LaSUR**
laboratoire
de sociologie
urbaine



Verband Geographie Schweiz
Association Suisse de Géographie
Associazione Svizzera di Geografia

Unil
UNIL | Université de Lausanne
Institut de géographie
et durabilité

Scope

The Swiss Mobility Conference (SMC) is the result of a collaboration between the chairs of urban sociology (EPFL) and geography of mobilities (UNIL). The objective of SMC is to provide a place for discussion and debate for researchers in humanities and social sciences working on various forms of mobility.

Presentations will address the mobilities in their diversity (housing choices, modal practices, multi-local dwelling, tourism, etc.). They can register in the following research areas:

- theoretical debates (and in particular the contributions of social theories to the study of mobilities);
- methodological innovations (using mobile methods);
- public policy and decision making in mobility;
- regulation of mobility and its tools;
- the actors and their logics of action;
- the norms and values underlying mobility and social inequality;
- temporality and spatiality of mobility;
- mobility prospective.

Location

The conference will take place on the campus of **University of Lausanne (at Geopolis 1620)** on both days. The map and location of the room are visible on the right.

Free wifi is available on the campus (freewifi-epfl).



Organizers

Vincent Kaufmann, Laboratoire de Sociologie Urbaine, EPFL

Patrick Rérat, Institut de Géographie et Durabilité, UNIL

Andreia Dinis Pinto, Institut de Géographie et Durabilité, UNIL

Chloé Montavon, Laboratoire de Sociologie Urbaine, EPFL

Scientific committee

Thomas Buhler, Université de Franche-Comté

Matteo Colleoni, Università Milano-Bicocca

Frédéric Dobruszkes, Université Libre de Bruxelles

Caroline Gallez, Université Gustave Eiffel

David Kaufmann, Eidgenössische Technische Hochschule (ETH) Zürich

Sven Kesselring, Hochschule für Wirtschaft und Umwelt (HfWU),

Nürtingen-Geislingen

Giulio Mattioli, TU Dortmund University

Timo Ohnmacht, Hochschule Luzern

Mathis Stock, Université de Lausanne (UNIL)

Stéphanie Vincent, Université Lyon 2

Restaurant

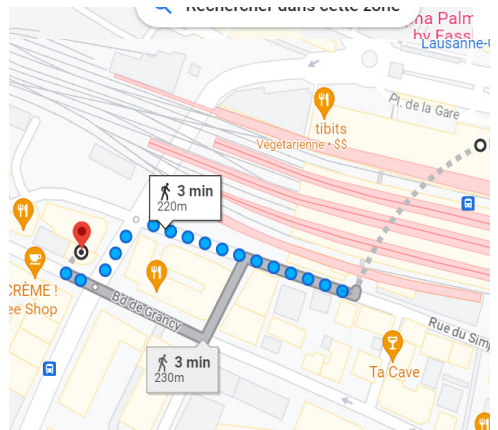
Meeting point at 7pm at the restaurant:

Le Milan,

Bd de Grancy 54,

CH -1006 Lausanne

From EPFL : Metro M2, direction Lausanne-Flon, station Lausanne-Flon ; then Metro M1, direction Ouchy, station Lausanne-Gare ; then 53minutes walking (see plan).



EVENT PROGRAM

14.09.2023 - UNIL - GEOPOLIS 1620

Welcome & Coffee **08.45 - 09.15 am**

Introduction by Vincent Kaufmann et Patrick Rérat **09.15 - 09.30 am**

01 NEW MOBILITIES [ENG]

- Noah BALTHASAR and Jana Z'ROTZ [HSLU] - Effects of HomeOffice and CoWorking on energy use for commuters. **09.30 am to 11.00 am**
- Laura HOSTETTLER MACIAS [UNIL]- How does telework impact residential and daily mobilities: new geographies of working and living in Switzerland.
- Louise BRUNDIN [University of Gothenburg] - Remaking everyday life when working from home: implications on daily mobility and residential location.

Coffee break **11.00 - 11.15 am**

02 PUBLIC TRANSPORTATION [ENG]

- Kevin BLATTER [HSLU]- Do price reductions attract customers in urban public transport? A synthetic control approach. **11.15 am to 12.45 pm**
- Michael WICKI [ETHZ] - Urban Densification, Displacement, and Public Transport Accessibility: An Examination of Train Stations in the Greater Zurich Area.
- Tiziano GEROSA [SUSPI] - Making night train services a valuable alternative to air travel: insights from mobility patterns of night train users in Switzerland.

Lunch break - Géopolis **12.45 - 13.45 am**

03 RESIDENTIAL CHOICE AND IMMOBILITIES [BILLINGUE]

- Audrey CHAMBOREDON [Science Po CRIS] - Choix scolaires, mobilité et immobilité résidentielle des familles dans la France urbaine. **13.45 pm to 15.45 pm**
- Jean-Pierre NICOLAS [LAET]- Statistical instrumentation of the notion of 'residential cost': first lessons from the EMC² of Grenoble 2019-2020.
- Tania MOUTAI [Science Po INED] - Can immobility explain emigration ? A qualitative research about French island people.
- Mehmet Ali TOPRAK [UNIL] - The Practices and Experiences of Tiny Houses: A Comparative Study of Switzerland and Turkey.

Coffee break **15.45 - 16.00 pm**

KEYNOTE - HENRIKE RAU [ENG] **16.00 pm**

Prof. of Social Geography and Sustainability Research, LMU Munich

Mobility across the life course: Understanding continuity and change in mobility cultures and practices **17.30 pm**

Dinner - Restaurant du Milan **19.00 pm**

15.09.2023 - UNIL - GEOPOLIS 1620

Welcome & Coffee **09.00 - 09.30 am**

KEYNOTE - CAROLINE BEGLINGER [FR]**9.30 - 10.30 am****Head of the Mobility Group, Federal Office for Spatial Development, ARE**

Future mobility in Switzerland: duty of the State or societal challenge?

Coffee break **10.30 - 10.45 am**

04 DAILY MOBILITIES [FR]

chair :
L. Halidmann

- **Joel MEISSONNIER [CEREMA]** - Daily mobility of elderly: processes of eviction and processes of avoidance of metropolitan core cities? The case of the Lille metropolis, France. **10.45 am to 12.15 am**
- **Guillaume DREVON [EPFL]** - How do the rhythms of daily life interact?
- **Leslie BELTON-CHEVALLIER [UNI Gustave Eiffel]** - La numérisation des achats ou un renouvellement dans la dimension genrée des pratiques de mobilité ?

Lunch break - Géopolis **12.15 - 13.45 am**

05 MOBILITY TRANSFORMATION [ENG]

chair :
V. Kaufmann

- **Marc-Edouard SCHULTHEISS [EPFL]** - The resistance regimes against the sustainable mobility transition. **13.45 am to 15.15 pm**
- **Pauline HOSOTTE [TRANSITEC]** - Traffic evaporation
- **Mirjam BAUMANN [ZHAW]** - Possibilities of multimodal mobility in rural areas.

Coffee break **15.15 - 15.30 pm**

06 ACTIVE MOBILITIES & MIRCOMOBILITIES [FR]

chair :
P. Rérat

- **Aurélié SCHMASSMANN [UNIL]** - Key events in young people's cycling trajectories **15.30 pm to 17.30 pm**
- **Daniel BAEHLER [Büro für Mobilität AG]** - The use of e-scooters in Switzerland – opportunities and challenges.
- **Tamara BOZOVIC [UWE]** - Associations between the deployment of shared e-scooters and walking experiences.
- **Claire PELGRIMS [UNI Gustave Eiffel]** - Gendered cyclist-bicycle assemblages in Lausanne : equipment trajectories in a hilly context between affective investments, customisation practices and an emerging ethic of care and securing.

Effects of HomeOffice and CoWorking on energy use for commuters

Noah BALTHASAR, Jana Z'ROTZ and Timo OHNMACHT

Institute for Tourism and Mobility, Competence Center for Mobility
University of Applied Sciences and Arts, Lucerne, Switzerland

The quantitative monitoring of energy savings and the greenhouse-gas mitigation potential introduced by interventions are central to a living-lab approach that aims to introduce transformative change within the discourse on climate change. However, valid population data on consumption patterns and mobility behaviour are often scarce, especially when the living lab is initially set up. Within the SWEET funding program (SWiss Energy research for the Energy Transition) of the Swiss Federal Office of Energy (SFOE) in the SWICE consortium (Sustainable Well-being for the individual and the Collectivity in the Energy transition), the modern “Suurstoffi” site in the municipality of Risch-Rotkreuz serves as a living lab.

Suurstoffi is a mixed neighbourhood that accommodates living, working and leisure activities and offers a starting point for interventions and investigations. As complex public-private partnerships, living labs offer an efficient approach to integrating partners into a collaborative methodology. Thus, our paper outlines a participatory research design to develop a population survey to gather key data to serve as a base line for the current situation of a living lab (e.g., T0-measurement). Based on residents' address data provided by the municipality, a cross-sectional survey was carried out between October and November 2022 (response rate = 33%, n=300). In the survey, residents indicated their place of work and the most frequent means of transport for their commute.

The paper presents the commuting emissions of the residents of the Suurstoffi neighbourhood in a quantified form. For this purpose, the distances and travel times of the residents' commutes are multiplied by the CO2 emissions and energy equivalents of the respective transport tools. The values and their impacts are reported and discussed in the paper. Initial results are highlighted that may be important in the climate discourse. Finally, conclusions will be drawn on how commuting emissions can be reduced in the living lab. The paper ends with practical recommendations and scientific implications for further research.

How does telework impact residential and daily mobilities: new geographies of working and living in Switzerland

Laura HOSTETTLER MACIAS, Emmanuel RAVALET,
Patrick RÉRAT

Institute of Geography and Sustainability, (IGD)
University of Lausanne, Switzerland

Telework (in its various forms) is by no means a new form of work but has been indubitably impacted and accelerated by the Covid-19 pandemic. In Switzerland, less than 25% of working people were teleworking before the pandemic. In 2021, they amounted to 39.6% which equals roughly 1.8 million people¹. Considering these telework dynamics, we question how telework influences the residential and daily mobility patterns of Switzerland. In April 2022, we organized a survey with a representative sample of working people in Switzerland (N=5'100). We propose to discuss the outcomes and rebound effects of telework on spatial mobilities.

Firstly, we assess the avoided commuting trips of teleworkers as we have information on distances travelled and transport modes used for commuting trips. We then plan to discuss two rebound effects: The first one discusses residential relocation and residential anchorage. Teleworkers do tend to live further from their place of work than non-teleworkers. Beyond that first element, we propose to use biographical information collected in our survey. We highlight for example that home-work distances increase with the length of time telework has been practised. The second rebound effect relates to the non-working trips done on teleworking days. It is assessed through the description made by surveyed people of their last non-teleworking day and their last teleworking day (in the case they use to telework). Results show that non-working trips

of teleworkers should be accounted for in both teleworking days and non-teleworking days, as they hold importance in both scenarios.

We finally observe that teleworking implies a change in geographies of working and living with new forms of spatial mobilities and distances travelled which are not necessarily shorter for all teleworkers. Observing the frequency of telework and the type of residential location can be valuable in identifying distinctions among teleworkers.

References

¹<https://www.bfs.admin.ch/bfs/fr/home/statistiques/culture-medias-societe-information-sport/societe-information/indicateurs-generaux/economie-nationale/teletravail.html>

Remaking everyday life when working from home: implications on daily mobility and residential location

Louise BRUNDIN, Eva THULIN, Bertil VILHELMSON

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During the pandemic, office workers were abruptly pushed into a home-based work life, as working from home became mandatory, full time, and digitally coordinated. The transition revealed an untapped potential of telework to reorganize daily life and facilitate resource-efficient adaptations. This study investigates the adjustments that took place, how daily life was remade in time and space, how change was experienced, and whether new preferences and habits were established. Drawing on in-depth interviews with 28 office workers, we examine whether the confined work-from-home pattern will have lasting influences on how and where people choose to live, work, relocate, and travel.

Theoretically, we view the mandated working from home as a work-life shock event, causing a disruptive, novel, and critical experience of adaptation. We employ time geography to enhance a spatiotemporal understanding of shock events, i.e., how daily life and the local order of home are rearranged under new constraints. Our findings indicate a remarkable shift in the willingness to continue the home-based work life, essentially caused by valued experiences of heavily reduced travel time, a sense of always being 'in place', and a calmer pace of life. Felt spatial, digital, and emotional crowding at home challenge the new order, and residential relocation as a strategy to sustain a home-based

work life is frequently mentioned. Although working from home is perceived as mostly efficient, the loss of informal social contact is driving a partial return to the office.

Do price reductions attract customers in urban public transport?

A synthetic control approach

Hannes WALLIMANN, Kevin BLÄTTLER, Widar VON ARX

Institute of Tourism and Mobility
University of Applied Sciences and Arts Lucerne, Switzerland

Our paper assesses the demand effects of lower public transport fares in Geneva, an urban area in Switzerland. Considering a unique sample based on transport companies' annual reports, we find that, when reducing the costs of annual season tickets, day tickets, and hourly tickets (by up to 29%, 6%, and 20%, respectively), demand increases over five years by about 10.6%.

To illustrate the price-reduction effect, we analyze the case of TPG, the main operator in the city of Geneva, and its agglomeration belt. To this end, we apply the synthetic control method (Abadie, Diamond, and Hainmueller, 2010, Abadie and Gardeazabal, 2003) to construct a synthetic TPG, a counterfactual that mimics the demand the company would have experienced in the absence of the price reduction. The thing to notice is that the methodology uses a data-driven procedure to create the synthetic TPG from comparable Swiss transport operators. To the best of our knowledge, we are the first to show how the synthetic control method can be used to assess such (for policy-makers) important price reduction effects in urban public transport. Also, as far as we know, it is the first causal estimate of price reduction initiated by direct democracy.

Furthermore, we propose an aggregate metric that inherits changes in public transport supply (e.g., frequency increases) to assess these demand effects, namely passenger trips per vehicle kilometre. This metric helps us to isolate the

impact of price reductions by ensuring that companies' supply changes do not affect estimators of interest. Moreover, considering CO2 emissions, an increase in the metric points to an average emission decrease of each passenger. In addition, we show how to investigate the robustness of results in similar settings. Finally, using a recent statistical method and a different study design, i.e., not blocking off supply changes as an alternate explanation of the effect, leads us to a lower bound of the effect, amounting to an increase of 3.7%.

Considering the revenue shares per ticket category of 2014, we assess an overall price discount of 12.6%. Based on the price discount of 12.6%, we get corresponding point elasticities of demand of -0.84 and -0.29 of our main result and the lower bound, respectively. Therefore, we show that price reductions in urban areas with high-quality public transport attract customers. However, the demand effect is too small to compensate for the loss of revenue due to lower prices.

Urban Densification, Displacement, and Public Transport Accessibility: An Examination of Train Stations in the Greater Zurich

Michael WICKI, Elena LUTZ, David KAUFMANN

¹Chair of Spatial Development and Urban Policy (SPUR)
ETH Zürich, Switzerland

Urban densification, particularly around public transit hubs like train stations, is a prevalent global phenomenon, often touted as a solution to housing shortages and a strategy to enhance public transit accessibility. Nonetheless, this process's implications on socio-economic disparities and transport equity necessitate further examination.

This research links the urban densification process in the Canton of Zurich, Switzerland, with its impact on public transport accessibility. Employing detailed administrative panel data on all buildings and households, complemented with data from the National Passenger Traffic Model (NPVM) of DETEC, we conduct a rigorous analysis. We particularly investigate the displacement of individuals, notably from low-income households, and scrutinize how these relocations influence their accessibility to public transport.

While densification might create new housing opportunities in close proximity to train stations, our study questions whether these benefits are equitably distributed or predominantly favor wealthier demographics. We delve into whether this process intensifies transport poverty among the displaced residents, thereby exacerbating existing disparities in public transit accessibility.

Our findings are poised to enrich discussions surrounding the complex dynamics between urban development, demographic shifts, and transport equity. We emphasize the necessity of integrating an equity perspective into urban densification policies to ensure the benefits of enhanced public transport accessibility are equitably shared across different socio-economic strata. This study is set to offer invaluable insights for policymakers, urban planners, and researchers, contributing to the creation of more inclusive and sustainable urban environments.

Making night train services a valuable alternative to air travel: insights from mobility patterns of night train users in Switzerland

Tiziano GEROSA¹, Francesca CELLINA¹, Stefano SCAGNOLARI²

¹ Institute of Applied Sustainability of the Built Environment (ISAAC),
SUPSI, Switzerland

² Institute of Economic Research (IRE)
USI, Switzerland

Addressing the air travel demand for leisure purposes is one of the key open challenges in transitioning to a low-carbon society. In Switzerland, where most of the flights are from/to nearby European countries, their replacement with night train (NT) services is a promising alternative. The empowerment of existing routes and the inclusion of additional destinations was recently announced, raising expectations for the relaunch of this previously neglected socio-technical innovation. However, there is still little research on the demand side, investigating how well-established NT are among this niche of long-distance travel innovators and whether the use of low-carbon transport solutions also extends to other areas of their life.

The present study aims to bridge this gap by answering the following research questions: 1) are long-distance travel choices of current NT users consolidated and environmentally consistent with their daily mobility practices? 2) what socio-demographic, contextual, and experiential factors mainly characterize their emergent mobility patterns? Answering these questions might provide new insights to increase the use of NT services by acting on factors influencing long-distance travel and daily mobility.

We use a mixed-method approach that combines inductive statistical techniques to identify recurrent clusters of daily and long-distance mobility practices with qualitative investigations on the underlying experiential factors. A web-based survey was first developed and distributed through email and invitation flyers to the carriages of all NT departing from Switzerland between Sep 2022 and Jan 2023. A total of 389 travelers answered the questionnaire, reporting on their socio-demo and travel mode choices. Additional information on the local degree of urbanization, accessibility of public transport, and political orientation were linked through the residence address given by the respondents. A latent class analysis was then conducted to identify subgroups of participants based on their travel choices and evaluate relevant predictors of group membership at both the individual and the local community levels. Members of each emerging class were then randomly invited to participate in a semi-structured interview to investigate the personal experiences underlying their choices.

The latent class analysis resulted in three groups of travel practitioners distinguished by a predominant use of rail and public transport (Green = 40%), mixed long-distance travel mode choices and car-oriented daily mobility (Strategic = 41%), preference for plane combined with public transport and active daily mobility (Compensatory = 19%). Compared to G, on average, S have larger families and live in less densely populated and environmentally concerned areas, while C feel less responsible towards climate issues. A total of 15 qualitative interviews with members of each class of travel practitioners were carried out, and the first results will be available in the summer of 2023.

Un regard situé sur la frontière ? Opinions et attitudes face à l'augmentation des flux transfrontaliers en Europe

Audrey CHAMBOREDON

Centre for Research on social InequalityS (CRIS)
Science Po Paris, France

L'objectif de la communication est d'étudier l'imbrication des choix résidentiels et scolaires des parents pour comprendre comment l'école et les choix scolaires influencent la mobilité résidentielle des familles. Il existe une littérature riche portant sur les choix scolaires en France, où les élèves sont affectés à une école publique selon leur lieu de résidence avec des possibilités à la marge de choisir un autre établissement (Oberti, 2007 ; van Zanten, 2009). Cependant, ces travaux portent surtout sur la scolarisation dans le privé ou l'obtention de dérogations pour aller dans une école publique « hors secteur », et peu s'intéressent aux liens entre mobilité résidentielle et choix scolaires. En outre, les auteurs qui se sont penchés sur ce sujet interrogent généralement le choix de vivre à proximité des « bonnes » écoles (Ramond & Oberti, 2020), sans mettre au coeur de leur analyse la question de la mobilité résidentielle en lien avec l'école en général.

La communication s'appuiera sur soixante-six entretiens réalisés auprès de parents d'élèves de 8 à 17 ans, vivant dans le centre-ville ou dans des communes de banlieues résidentielles de deux métropoles régionales françaises, Lille et Toulouse.

Les résultats et leurs implications théoriques seront discutés en deux temps. Premièrement, la majorité des parents rencontrés au cours de l'enquête ne

prennent pas directement en compte l'école dans le choix de leur logement, du moins avant que leurs enfants soient en primaire. Cependant, l'importance qu'ils et elles accordent à la proximité des établissements scolaires et au maintien des enfants dans les mêmes cercles de sociabilité contraint ensuite leur mobilité résidentielle. S'éloignant du prisme théorique qui s'intéresse à la mobilité résidentielle des familles pour se rapprocher des « bonnes » écoles, nos résultats invitent à s'interroger sur l'immobilité résidentielle des familles avec enfants scolarisés.

Dans un deuxième temps, nous verrons que les contraintes liées au maintien des enfants dans la même école sont particulièrement visibles dans les cas de séparations conjugales. Les parents font souvent des arbitrages entre rester vivre à proximité de l'école, dans des quartiers parfois devenus trop chers pour s'y loger seul, ou effectuer des trajets quotidiens importants pour ne pas changer leurs enfants d'école. L'analyse de quinze cas de parents séparés permettra d'approfondir l'étude des arbitrages entre mobilité résidentielle et mobilité quotidienne en contexte urbain en France, en s'intéressant notamment aux variations selon le genre. Les femmes ont plus souvent la garde des enfants mais sont aussi celles qui perdent financièrement le plus au moment de la séparation (Crepin, 2022), et il est souvent plus difficile pour elles de rester vivre dans un quartier où elles avaient pu acheter ou louer un logement en couple.

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Statistical instrumentation of the notion of ‘residential cost’: first lessons from the EMC² of Grenoble 2019-2020

Ali EL ZEIN¹, Hakim OUARAS², Jean-Pierre NICOLAS¹, Damien VERRY²,
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⁴ UMR EVS, Mines Saint Etienne, France

The idea of jointly considering household expenditure on housing and daily mobility to account for the economic and social issues associated with residential location is a long-standing one (Polacchini and Orfeuil, 1999). These expenses are linked by the dynamics of the property market and the residential locations induced (Coulombel, 2018), and the sharp variations in energy prices over the last 20 years have regularly revived interest in tackling them together (Haas et al., 2006; Mattioli et al., 2018; Morency et al., 2022). In France, this interest has led to the emergence of the notion of ‘residential cost’, which puts forward a systemic vision that makes it possible to consider this expenditure from the way of life angle and to analyse it both at the level of individual households (what level and what structure of expenditure according to the socio-economic characteristics and location of households?) and at the collective level of territories (what costs for the community in terms of public facilities and infrastructure, what social and environmental impacts can be linked to this residential cost?) (Maresca and Mercurio, 2014). This notion thus sheds light on social, economic and territorial concerns, as well as environmental and energy transition issues (CEREMA, 2016).

For the time being, however, the notion of residential cost remains limited by the statistics available, which provide detailed information on household expenditure on housing on the one hand, and on daily mobility on the other, but not for both at the same time, particularly in relation to a precisely identified residential location.

An experiment is currently underway to fill this gap using an optional module added to Cerema Certified Household Surveys (EMC²), tested in Grenoble in 2019-2020 and Clermont-Ferrand in 2022-2023. The aim of this paper is to demonstrate the value of this module by presenting the first analyses drawn from the Grenoble survey:

- Who spends how much and for what items according to their socio-economic characteristics and their residential location? Can we draw explanatory schemes of the level and structure of the residential cost that cross our knowledge of mobility on the one hand and housing on the other?
- What social and environmental issues can be highlighted, between households that are economically weakened by this residential cost in relation to their resources, and less constrained households that may have high energy costs?

Références

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Can immobility explain emigration ?

A qualitative research about French island people

Tania MOUTAI

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In the sociology of migration, emigration has often been studied through the lens of experiences at the destination. Considerations of the place of departure have been, at best, used to understand what migrants were fleeing from, local inequalities, and the selection process at the outset. Although these studies have contributed to the advancement of sociology (Rea, 2021), they have often neglected to involve non-migrating populations in the equation in order to better document the underlying mechanisms of emigration.

This presentation explores the following question : does the understanding of immobility in relation to emigration help to explain the selection at departure?

This communication questions the contribution of Immobility studies. This sociological approach stands in contrast to the mobility turn theorized by John Urry and Mimi Sheller (2006) ; it challenges the subordination of spatial immobility to failure or poverty and its interpretation within mobility-centric concepts. Empirically, we draw on a corpus of 25 semi-structured interviews conducted with Corsican and Martinican populations who have chosen to live on the island instead of emigrating to the French mainland. Island populations are ideal for this inquiry because emigration is a significant phenomenon in French peripheral territories, influenced by both island constraints and the prevailing culture of departure (Haddad, 2019; Alexander, 2016).

Firstly, we will demonstrate that immobility is not only indicative of poverty. For island populations, immobility also represents a selection process : some people choose to stay and have the means to adapt to island specific challen-

ges, while others did not choose to be on the island. This perspective allows us to explore what motivates individuals to emigrate. Secondly, we will emphasize the importance of temporality in understanding immobility. As residential patterns evolve over one's lifetime, emigration can be seen as a form of mobility within a broader sequence of immobility and mobility, relative to the reference scale. Finally, we will observe that the meaning of immobility in relation to emigration varies during life stages and across generations. Involuntary immobility during one's educational years can transform into voluntary immobility in adulthood. Likewise, voluntary immobility can be categorized as involuntary for people who lack the economic and cultural capital to consider emigration as a means of social ascent, particularly during a time when human mobility was not widespread (in the 1960s).

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The Practices and Experiences of Tiny Houses: A Comparative Study of Switzerland and Turkey

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This paper provides a comparative analysis of tiny house practices and experiences in Switzerland and Turkey. A tiny house is a small dwelling (e.g. ranging from 9 m² to 37 m²), that is smaller than traditional houses. Tiny houses, often built on wheels or a trailer for mobility, are designed to maximize the efficiency of space use and functionality while considering environmental, social, and economic factors (Ford & Gomez & Lanier, 2017). Originating in the United States after the Great Depression, the tiny house emerged as a financially viable and visually appealing option to conventional housing. This movement was further accelerated by the 2008 economic crisis and the Covid-19 pandemic, with more individuals seeking sustainable and cost-effective living alternatives.

The tiny house, as a tangible expression of social practice, is intricately linked to the skills and mental processes of society and is shaped by social, historical, and economic factors. By emphasizing the ways in which people participate in routine activities and practices, social practice theory provides a more comprehensive understanding of the transition to tiny house living, including the experiences and practices involved (Watson et.al. 2012). With the concepts adopted from social practice theory, the main questions of the

paper are as follows: What are the main motivations for people's transition to tiny house life? What does the tiny house mean for its inhabitants? (Meanings), What are the legal regulations and legal gaps in Tiny House practice? (Skills) What are the practices on tiny houses, land, and infrastructure? (Materials)

The tiny house movement has gained worldwide popularity the last decade and sparked an increase in research. Studies on tiny houses have identified several key themes, including the housing market, environmentalism, sustainability, and lifestyle, which shed light on people's motivations for transitioning to tiny house living. Boeckermann et al. (2019) examined for example factors such as cost, simple living, freedom and mobility, sustainability and environmental impact, design, empowerment, and sense of community as motivators for adopting the tiny house lifestyle. However, the specific meaning and motivations behind tiny house living vary depending on each country's social, economic, and historical conditions.

The study utilized quantitative and qualitative research methods to understand the key motivations and experiences of individuals who own tiny houses in Switzerland and Turkey. An online survey and open-ended interviews were conducted to gather information on tiny house practices and experiences in both countries. In addition, internet resources such as social media groups and forums focused on tiny houses were used to supplement the data. The social, economic, and historical contexts of both Switzerland and Turkey will be considered in the comparison. The study will investigate the legal regulations and gaps, as well as motivations, experiences, and the mean of tiny houses in each country. This will lead to a thorough evaluation of the differences and similarities in tiny house practices between Switzerland and Turkey.

Daily mobility of elderly: processes of eviction and processes of avoidance of metropolitan core cities? The case of the Lille metropolis, France.

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Context : According to the latest mobility survey (EMD, 2016) in 2016, people aged 55 and over (nearly 300,000 people) make 120,000 more trips by car each day than in 2006 (+ 30% increase). This can be explained by the greater demographic weight of the «55 and over» population (+ 9%), by their increased mobility (+ 6%) and by their greater use of the car (whose modal share has increased by 11%). They make more than 6 out of 10 trips by car (62%), which is higher than the average for metropolitan areas (57%) (Plan de Mobilité MEL, 2022). The perspective of a sustainable mobility public policy explicitly targeting seniors drives our investigation.

Issue : The new seniors (baby boomers) seem to be very fond of their car to the point that a clear increase in trips by car for all other purposes than work/study is observed when they retire (Mertiny, Meissonnier, 2021). Proportionally to the working population elderly use the car more often for their daily trips. This finding is counter-intuitive since retirees are notoriously less constrained in their schedules than working people. This particular availability could have promoted the use of slow or intermittent modes (public transportation, active modes). How can we understand this tropism towards the car use among older people? We will put forward the hypothesis of a double process of eviction and avoidance of metropolitan core cities (where walking and public transport are easy). And symmetrically we can see a relegation or polarization (depending on the point

of view) on the peripheral urban areas, where accessibility is almost exclusively by car.

Method: On behalf of the European Metropolis of Lille, we are currently conducting a longitudinal survey on the mobility of elderly over the period 2020-2024. One of the goals of this survey is to better understand the changing travel behavior of the baby boomers. This survey includes a quantitative part - quota with a sample of 1000 seniors (65 years and older) - and a qualitative part - comprehensive semi-structured interviews (face-to-face first then by telephone due to the COVID epidemic) with a diversified panel of 27 households over 65 years old.

Results : More than the rest of the population elderly are deterred from going to the city centre of Lille. And if they live in Lille, they flee the hypercentre. On the one hand, they complain about the lack of accessibility by car, which shows a process of avoidance linked with public policies to reduce the offer of parking space, increasing price and number of paid parking spaces, more complex traffic patterns for motorists... On the other hand they complain of a process of eviction linked to their age in public transport and public space in Lille: difficulties with digital tools in preparing a public transport journey, great confusion in the various fare and ticketing offers, feelings of insecurity mainly caused by dirtiness and an awareness of their own vulnerability.

As they appreciate the convenience of peripheral shopping areas, weekly used when they were working, the new senior citizens are therefore more likely to turn to them than to the city centres for most of their activities (shopping, but also health and leisure services). In so doing, they make their dependence on the car last for their daily travel. This would explain this new tropism for the car use in the 65-80 age group.

Polyrhythms

How do the rhythms of daily life interact?

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Background and research questions

The recent literature on how 'time' is perceived and experienced in contemporary societies often highlights intense paces of life. These are accompanied by exhaustion, fatigue and burnout symptoms (Rosa, 2013). These symptoms are associated with time pressure that can originate in the family and professional spheres or in the organisation of daily activity travel (Drevon et al., 2020; Reid-Musson, 2017; Rose, 2017). A chronic feeling of not having enough time is symptomatic of time pressure (Szollos, 2009). The majority of the research undertaken in this area has focused on populations that are indeed time-poor, have structural imbalances related to the work and family spheres, and have to adopt mutual support and organisation strategies to cope. The analysis of the rhythms of daily life is often sectorised according to the dimensions of social life, mobility and working life. In this contribution, we propose a multi-sectoral approach (Polyrhythms) that takes into account the different spheres of life in a joint manner. In this perspective, the first objective of this proposal is to understand how the rhythms of mobility and the domestic and professional spheres interact? Are there compensatory or reinforcing effects? What are the social factors? We will also try to show that certain resources, linked in particular to the characteristics of housing, social relations or equipment, are likely to alleviate temporal pressures.

Data

The analysis was based on a quantitative survey of a representative sample of 2,283 inhabitants of the Canton of Geneva, Switzerland (Schultheiss et al., 2023). The sample was representative at the 'commune' level with respect to gender and age. The respondents were reached by 4,500 letters. The response rate was approximately 50%. This was a satisfactory rate compared with other methods (Bergman, 2008). Data collection was based on the self-administered survey technique (Schultheiss et al., 2023). People could choose to complete the questionnaire either on paper or on the web. The survey protocol and the completion procedures complied with the GDPR guidelines and ethical recommendations on the protection of personal data. On the one hand, the survey focused on living conditions and housing

satisfaction in the Canton of Geneva. On the other hand, it focused on daily rhythms and satisfaction with daily life.

Methods and expected results

A confirmatory factor analysis (CFA) followed by a structural equation model (SEM) was used. The SEM consisted of two parts: a measurement model and a structural model. The principle of the measurement model is to construct latent variables from a set of observed variables. The choice of indicators was guided by the empirical literature. The latent variables are introduced from a CFA and Cronbach's alpha for the congruence of the indicators (Hoyle, 2014). The structural model then establishes explicit links between the different latent variables, which will allow for hypothesis testing. This combination of methods is frequently used to test whether a set of indicators reflects a theoretical construct (Anderson & Gerbing, 1988). In our case, this approach was applied on the one hand to the estimation of latent variables about domestic and work-related time pressure and on the other hand to mobility rhythms. Variables about sociodemographic characteristics, housing equipment and social support are also included in the analysis.

Our results will show interactions between daily life rhythms depending mobility, housing and working sectors of daily life. The second contribution is to integrate latent alleviating factors that tend to alleviate time pressure. According to the literature, we suppose that social inequalities appear concerning time pressure management. In terms of alleviating factors, we assume that satisfaction with cohabitation and housing characteristics could potentially alleviate time pressure. The results pave the way for new public policies based on rhythmic approaches.

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The digitalisation of purchases as a renewal in the gendered dimension of mobility practices?

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Shopping is one of the main reasons why people travel. In France, in 2008 (Quételard & Nord-Picardie, 2010), shopping was the second most important reason for household travel during the week, after work (excluding home travel). In 2019, it will become the third most important reason for travel during the week (including home travel) and the most important reason for weekend travel (excluding home travel). French households spend an average of 30 minutes per day, including 7 minutes of travel time for shopping (Brousse, 2015). At the same time, shopping practices are increasingly based on digital technologies that provide opportunities for alternative travel. According to the FEVAD (2022), 41.8 million French people have bought online, i.e. 76% of the population aged 12 and over (Hoibian et al., 2021). However, this digitisation of everyday life does not necessarily have the same impact on people's practices, either by considering their social, spatial and, more specifically here, gender dimensions.

Indeed, shopping is one of the domestic activities that is subject to a strong gender divide, with women still doing more in this area than men, even if the latter tend to do more and more (Brousse, 2015). The same is true for domestic mobility or domestic mobility work, which is still mainly undertaken by women (Gilow, 2019). In this context, the gendered dimension of online purchases and their translation into travel practices remains relatively unexplored: excluding food purchases, men tend to buy online more often and to use in-store collection than women, who tend to buy less online and to use relay points (Hoibian et al., 2021). In doing so, to what extent is the gendered dimension of purchasing practices reflected at different stages of an online purchase (going to the shop to see or touch the good beforehand, managing the logistics or retrieval of the

purchased good, etc.), from the upstream decision-making and investigation phase to the downstream phase where the good will be retrieved? This question has already been explored in the case of specific practices such as the french food drive (Pernot, 2021), but remains to be extended to other types of purchases.

Through a qualitative survey by semi-directive interviews conducted among 50 French households diversified (age, territory, assets, etc.) in 2022, our proposed paper aims to analyse and capture in detail the complexity and diversity of travel related to the online shopping practices of individuals and their constructions at the household level. More specifically, our results highlight the extent to which the interactions implemented within households and between spouses around their online purchases are an extension of the gendered construction of mobilities. Further on, the aim is to understand the extent to which online shopping is accompanied by a redefinition of the roles and practices of shopping and travel within couples, between men and women. To what extent does the logistical management of these purchases redistribute or reaffirm, in their own modest way, the gendered distribution of spaces? We thus show that the digitalisation of purchasing tends to fuel the invisibilisation of care work (Krinsky & Simonet, 2012), while reinforcing the permanence of the gendered division of domestic labour in its logistical and spatial dimensions.

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The *resistance regimes* against the sustainable mobility transition

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Keywords : Resistance to change; Mobility practices; Mode choice; Computational sociology; Justification regime; Urban pathology; Micro-social; Uncertainty; Automobile system; Domination.

Project description :

In a context where the automobile system dominates culture, pace of life, other modes of transport and environmental resources, we propose to study what are the resistances to change in urban travel behaviors and mobility practices. The social discourse surrounding the climate emergency progressively infuses the society, transforming into both micro- and macro-social injunctions to change. Yet, society – grounded in a territorial, social, and cultural contingency – appears to resist the necessary behavioral and institutional transformations.

By using data sources of different scope and types (e.g., ARE, 2015; Google Transit API, 2022; Molloy et al., 2022; OSM Wiki, 2021), and adopting an interdisciplinary scientific approach (see Schultheiss, 2023), we mainly studied how social dynamics related to home-making, ways of living, modal practices, public policies, or public transit translate into micro-social, macro-social, or latent resistance to change in mobility practices (Schultheiss, 2022; Schultheiss, del Puppo, et al., 2023; Schultheiss, Pattaroni, et al., 2023; Schultheiss & Kaufmann, 2023b, 2023a).

As a general result, we introduce the novel concept of *agent-based resistance regimes*. Resistance regimes make it possible: to take distance from the multi-scalar differentiation of resistances (micro, and broader) which are not in opposition nor hierarchical, but interconnected in the ordinary life of the homosociologus; to situate the agent within a socio-territorial context and a biography; to piece together the logics of justification (contradictory or not) mobilized by the agent to legitimate their mobility practices; and to make sense of the reciprocal adjustments between agents and social structures.

This project resituates the importance of social sciences to accompany the sustainable transition, in particular in mobility practices.

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Traffic evaporation

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Keywords : Mobility; motility; planning; temporality; change; habits; behaviours.

Project description :

This research is the result of four years of practical and scientific investigation of the phenomenon of traffic evaporation, which was considered and then demonstrated to be the opposite of traffic induction. It has anchored, in practice and in time, an orphaned and scarcely documented topic in literature which mobility planners are facing.

Our research was conducted with one foot firmly grounded in the practice of mobility engineering and the other in the urban sociology of mobility behaviour. Immersed in the first field as a “project engineer” on various projects, I was able to investigate a great number of case studies and enrich the thesis with the questions of experts and commissioners. In order to answer these questions, beyond the quantitative and measurable aspects that account for the engineer’s daily bread, the qualitative methods of urban sociology were mobilised to decipher the rationales for action of these individuals that make up traffic flows.

This singular approach revealed the number and diversity of factors that are at play in the mechanism of traffic evaporation. These include motility, the mental cost of learning, the anchoring of modal habits and the value rationale of

each individual. At the crossroads of the three research foci, which are usually treated separately and which we have combined in our case studies, i.e. the temporality of disruption, the (re)actions of the authorities and the weight of (multi)modal habits, we have been able to observe orders of magnitude beyond traffic evaporation.

The results show, first of all, that traffic evaporation is achievable over the long-term of urban planning, because the time of mobility habits and learning of usage is also long, although it seems to accelerate once learning is triggered. Moreover, our results show that traffic volumes which we thought would always increase in the past can be controlled. This legitimate confidence in the reversibility of traffic induction draws attention to levers that are now, in turn, perhaps being underestimated in mobility planning.

Secondly, the study of urban construction sites has shown that the keys to understanding the reactions of the traffic flow lie in the varied profiles of the individuals who make it up. Knowing their rationales for action, it is possible to assess which behavioural changes will be temporary and which will be lasting, and thus to steer them if desired.

Finally, we have revealed that, in the face of the unforeseen, the activation of motility levers is strong and prompt, with the aim of overcoming personal barriers to change. In these cases, the behaviours adopted seem to last beyond the duration of the disruption.

Thus, traffic evaporation appears to be much more than a new variable to be considered in mobility analyses and planning. It calls into question the logic that has driven travel planning in the automobile era.

Possibilities of multimodal mobility in rural areas

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The mobility sector causes about 1/3 of the total Green House Gas emissions in Switzerland (BAFU, 2021). The largest share of this falls onto private vehicles which additionally often have occupancy rates as low as 1.1 to 1.6 persons per car (BFS & ARE, 2017). While electric cars will contribute to decarbonization, the mobility sector needs to shift towards a stronger use of public and active transport and also include pooling and sharing options, hence becoming multimodal. Although cities are implementing transportation policies to increase the use of public transport and provide multimodal options, rural regions, with even stronger car dependency and low availability of alternatives, are facing stronger transformation challenges. Focusing on the rural region of Toggenburg, in Switzerland, the research project SUSMOBTOGG, funded by the Swiss Federal Office of Energy, aims to develop rural-focused multimodal mobility approaches considering the specific regional mobility challenges and the needs of different stakeholders (e.g., mobility users, mobility providers, local authorities). The study analyses mobility challenges and usage patterns in the area, user needs and reasons for current and future travel scenarios and involves local institutions and mobility providers in a stakeholder process to identify effective and sustainable future transport scenarios for the region. Once promising mobility scenarios have been identified, the project will provide an analysis of suitable business models and financing mechanisms.

To understand the current mobility behavior and mobility needs as well as the attitudes towards new mobility services, two surveys were conducted. Participants were asked about their perspectives on various topics, including car sharing, carpooling, on-demand services, bike sharing and multimodal travel, such as combining public transportation and e-scooters to cover the last mile. One survey collected data from residents of rural areas (N=973) in German-speaking Switzerland, while a second survey analysed tourists from Toggenburg (N=572). The goal was to assess their willingness to consider alternative modes of transportation beyond cars, and to identify the measures needed to facilitate such options. This contribution presents results from and statistical analysis such as multinomial regressions of the surveys to examine what alternative mobility approaches might be promising for rural areas, and what incentives and behavioral changes are needed to make them work. This will allow to design sustainable and effective multimodal mobility scenarios tailored to the specific needs and challenges of rural areas, and to provide recommendations for policymakers and mobility providers on how to encourage the shift towards more sustainable transportation in these regions.

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Key events in young people's cycling trajectories

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Cycling among children and young people is declining in most European and North American countries (McDonald et al., 2021). Switzerland, the country on which our study focuses, is no exception to this observation: a decline can be observed as young people get older. This trend raises several crucial issues, in particular the fact that mobility experiences during youth are important factors in the continuation of these practices into adulthood. In order to understand how young people's cycling trajectories evolve, we propose to study this phenomenon from two angles: socialisation and hosting potential of the territory.

Firstly, as children's mobility skills develop according to the family context in the early years (Kaufmann et Widmer, 2005), it is necessary to identify and understand the contexts and mechanisms linked to the activation or non-activation of these dispositions. Over the years, parental influence clashes with the secondary socialization experienced from the formation of the first groups of friends, which will also determine behaviour in terms of mobility (Baslington, 2008).

Secondly, the hosting potential of the territory (or its bikeability), in terms of both infrastructure and standards and rules, also influences the experience and the feeling of safety. The latter, whether traffic-related or not, encourages parents to monitor their children's daily movements and practices more closely (Mitra & Manaugh, 2020).

This paper seeks to identify the key events that explain the different cycling trajectories of young people. The aim is to highlight the biographical trajectories of young people regarding their use of the bicycle, and to identify the socio-familial and territorial influences linked to this practice. Both Mobility Biographies and Travel Socialization Studies are used here to examine “the social production of spatial mobility choices” (Cacciari, 2020).

A qualitative approach was used here through individual biographical interviews with around forty young people aged between 12 and 20, attending various schools in the municipality of Yverdon-les-Bains (CH). At the same time, interviews were conducted with around ten parents in order to identify potential influences in terms of mobility practices. The aim here is to present the main cycling trajectories identified during the interviews and to highlight the key events associated with cycling during youth.

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The use of e-scooters in Switzerland : opportunities and challenges for transport planning in the city of the future

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Electric vehicles and vehicle-like devices are shaking up the use of street spaces: fast and slow e-bikes, three-wheeled vehicles for logistics and mono- or two-wheeled electric trend vehicles. Shared e-scooters have spread particularly rapidly in Swiss cities. At the same time, the sales figures of private e-scooters are rising rapidly. This development raises many questions: What demands do e-scooters place on future traffic space? How should the public authorities deal with the traffic planning effects of the use and parking of e-scooters? How can e-scooters be integrated into the overall mobility system sustainably and in coexistence with pedestrian and bicycle traffic?

There are only few findings on the use of private as well as shared e-scooters in Switzerland (SVI 2016). The use of shared e-scooters at the international level is somewhat better researched, especially in metropolises such as Portland, San Francisco or Paris. These studies show that e-scooters often replace walking and cycling, but also public transport and taxi journeys (Agora Verkehrswende 2019).

For this reason, an interdisciplinary research team (including Büro für Mobilität AG and OST - the University of Applied Sciences of Eastern Switzerland) is working on the above-mentioned questions as part of a study for the Swiss

Federal Roads Office. In a first step, the current use of e-scooters in Switzerland was investigated with the help of a literature review and a survey of users and non-users. The results of the more than 2,000 responses to the online survey will be pre-sented and discussed. What opportunities and challenges arise from the identified use? The other steps of the project – including discussions with experts, the development of future scenarios, modelling of modal shift effects and road tests – will also contribute to answering the open ques-tions.

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Associations between the deployment of shared e-scooters and walking experiences

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Keywords : Walking; e-scooters; shared micro-mobility; walking experience; disability

Main research agendas:

- Public policy and decision making in mobility
- Regulation of mobility and its tools

Project description :

Shared e-scooter schemes are a new addition to the transport mix and promise a convenient solution for urban travel. The benefit for some, could however represent a negative impact for others. Thus, disabled people for instance call for a better understanding of the impacts of schemes on the walking environment. To date, research on the interactions between e-scooter schemes and walking experiences limited. This is an important issue, as the place of shared e-scooters in urban transport systems is being (re)negotiated and within a broader necessity of enabling and encouraging walking, providing for environments that feel safe, as a basic minimum requirement.

This presentation reports on a study aimed at better understanding associations between the deployment of shared e-scooters and walking experiences in Bristol, site of the largest trial of shared use e-scooters in the UK. Two theo-

retical frameworks are adopted: (a) the Social Model of Disability; and (b) the Social Model of Walkability. The first considers how barriers disable and the second considers how environments and the transport system. This investigation was financed by the West of England Combined Authority, to whom results were reported. Data were derived from: (a) a street intercept survey of pedestrians to understand perceived levels of safety (n=643); and (b) in-depth walk-along interviews to explore experiences of footway use relative to e-scooter use and parking (n=9).

The intercept surveys were analysed to compare perceived levels of safety with disability and e-scooter use, and frequency of safety related concerns. Inductive content analysis was used to identify and structure associations of insights, experiences and disability from the interviews.

Disabled people and non-users of shared e-scooters had higher odds of feeling unsafe around riders. Walk-along interviews provided rich insights on experiences and interesting thoughts on the philosophy of the use of public space.

The study contributes original insights and highlight the magnitude of impacts of shared e-scooter schemes on pedestrians - and namely on their perceived safety. These impacts are felt in diverse ways across demographic groups. Decisions about shared e-scooter scheme deployment and their operations need to be aligned with, and adapted in response to, in -depth local engagement with pedestrians, focusing particularly on those who may be disadvantaged by the scheme.

**Gendered cyclist-bicycle assemblages in Lausanne:
equipment trajectories in a hilly context between affective investments,
customisation practices and an emerging ethic of care and securing**

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European cities have developed urban policies that promote cycling practices (infrastructure, awareness raising) and household cycling equipment (sales incentives, shared bicycle fleet). In traditionally car-oriented cities, regional and urban mobility policies tend nevertheless to overlook the gendered aspects of bicycle culture, and more generally the gendered mobility pattern complexities (complex escort trips, vulnerability perception issues) and policies' impact on gender as social constructs. Bicycles, as cars, are gendered 'attributes', emotionally invested, objects of technical knowledge (repair) and micro-practices that correspond to differentiated form of socialisation to risk and dominant norms of femininity/masculinity.

The diversification of cycles and accessories (VTT, city bikes, cargo bikes, bike trailers, children bike seat, electrically assisted bicycles, stickers, ...) tend to strengthen and answer the needs of new gendered uses and 'tactics'. It makes cycling accessible, modulates the sportive dimension of cycling, and creates new gendered cyclist-bicycle assemblages. Yet, gender norms still hinder the development of sustainable cycling mobility. These paper documents the emerging tension, in the relationship between bicycles and bodies, between (1) dominant norms of femininity/masculinity (self-presentation, endangerment) and (2) emerging values of the bicycle as a symbol of (and vehicle for) an alternative society (sustainable lifestyles, valorisation of effort, de-gendered sportive and

playful practices). It will describe the observed cyclist-bicycle assemblages, their adaptation to the hilly and infrastructural context, and focuses on affective investments in the object, customisation practices, and how bicycles participate, notably in parental escort trips, in an ethic of care and securing. The original approach analyses these gendered/ing processes from their aesthetical dimension, linking corporeal sensibility and affectivity. Aesthetical approaches are indeed essential as the success of sustainable policies requires a transition from convictions to spontaneous, habitual practices. The research results build on the interviews of 10 resource persons (salespeople, repair workshop volunteers, cycling organisation members) and mobile video-ethnographic analyses (peak and off-peak hours, local and major roads) of gendered choices of equipment (bicycle, accessories, clothing, customisation) and corporeal positioning on bicycles carried out during a field survey in Lausanne between May and July 2022. The research contributes to a better understanding of the gendering processes across cycling and their potential for the sustainable mobility transition.

