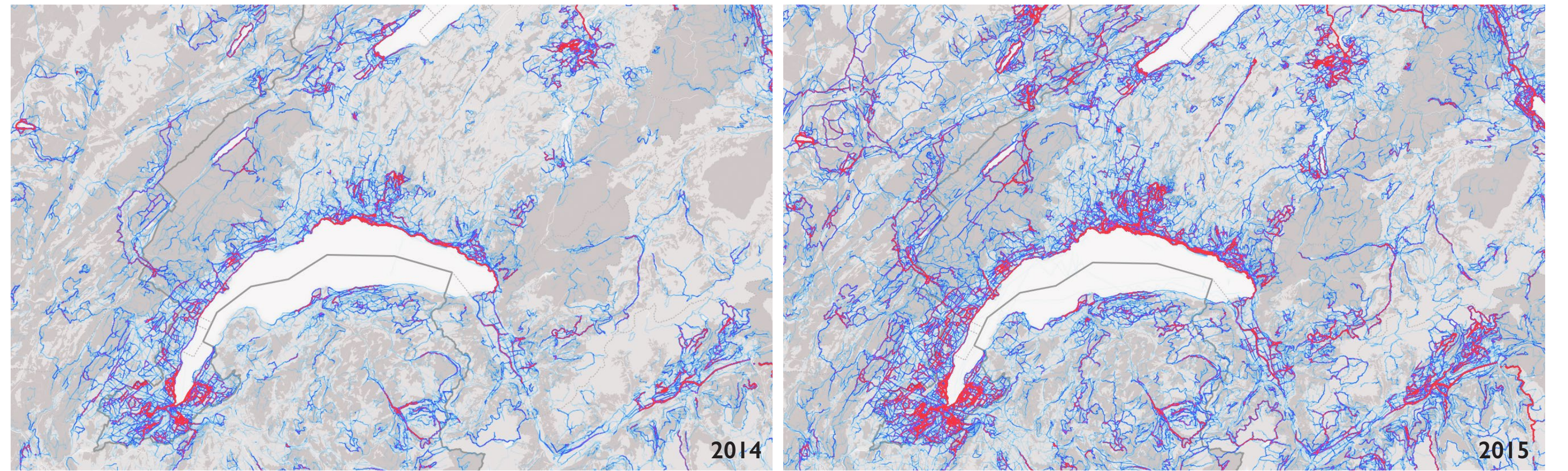


# Spaces of *Effort*, Exploration of an Experience of Active Mobility

## ABSTRACT

This article combines empirical, theoretical and philosophical references to explore the notion of *Effort* as an integral part of active mobility and in general of urban experience. Considering the increasing value of physical effort in urban life styles, we challenge the general premise of transport planning that tends to reduce the effort required for mobility - particularly when providing alternatives to car use. Informed by interviews we have conducted with inhabitants of three major agglomerations in Switzerland, Zurich, Geneva and Lausanne, we identify a threefold approach to effort, and explore the spatial implications of them for urban spaces that contribute to the practice of active mobility. We introduce the notion of *entraining effort* as engaging and stimulating experience that improves the

actor's qualifications and results in the development of skills that facilitate making more effort. We take examples of existing urban spaces that effectively accommodate varied physical activities, and encourage entraining effort, underlining these spaces' fragmentary character and that they are rarely part of the daily urban commute. We conclude that in order to effectively move toward prevalence of active mobility, engaging and integrating the attractive effort in daily commutes, these spaces need to form an ensemble - providing accessibility throughout the city.



Tracked Running in Switzerland, 2014 vs. 2015  
Source: Strava: <http://bit.ly/strava-com/heatmap/2014-2015.html#106,52039146,41880>/grayfun

Daily physical activities today are measured, registered and even shared through social networks by individuals, using fitness trackers, smartphones, and other accessories (e.g. health applications, fitbit, iwatch).

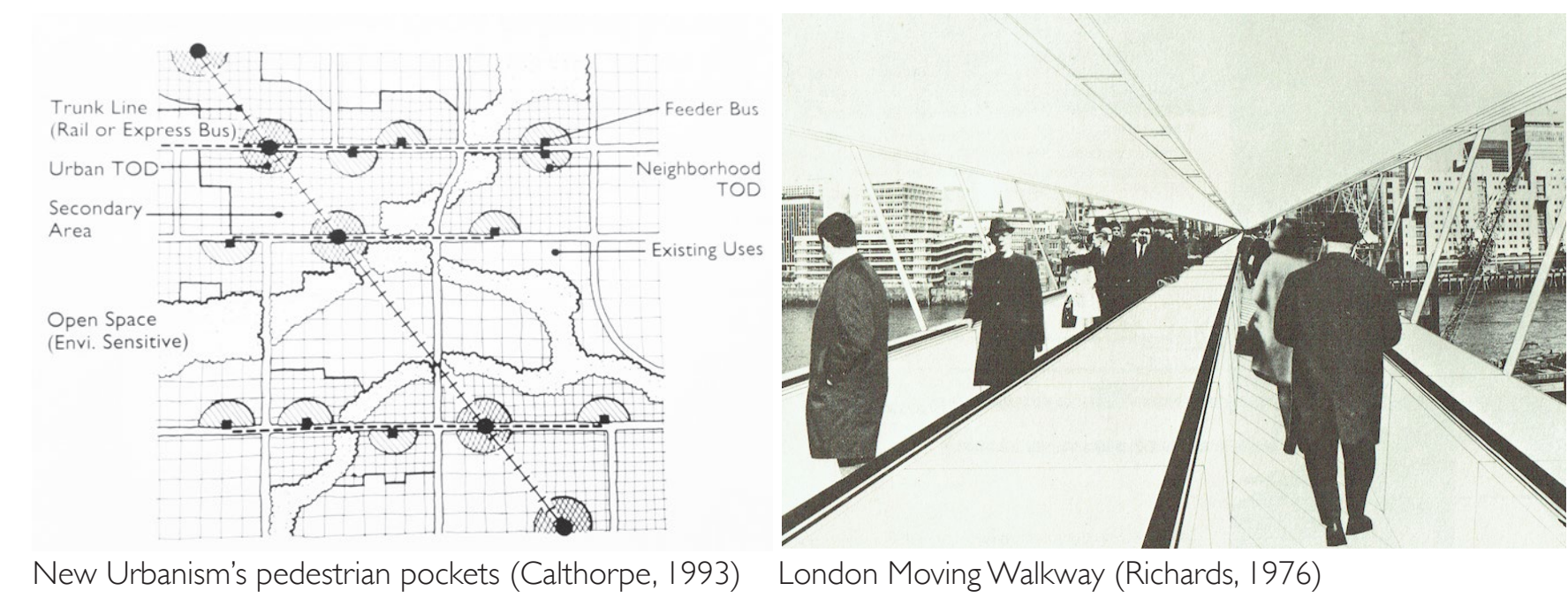
**KEYWORDS:** Effort; Physical activity; Mobility; Active Mobility; Experience; Urban projects.

## Effort: three approaches

### Minimizing Effort

“Man does not like to work - neither muscle work, nor brain work [...] I am almost tempted to say that the habit of working is one of the most striking phenomena of human psychology.”  
(Ferrero 1894, 177)

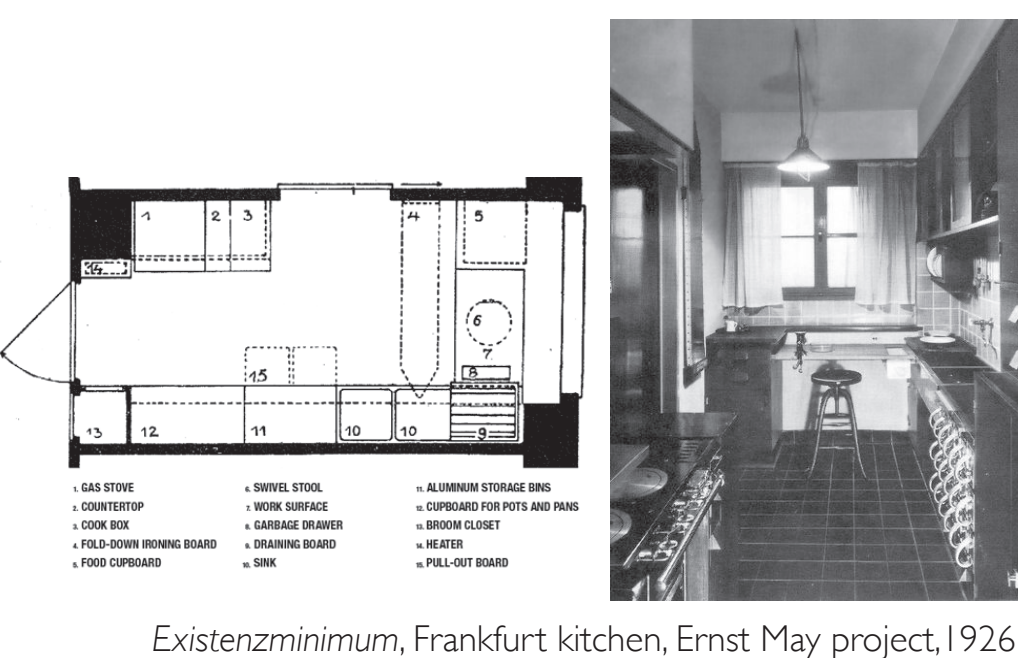
Some authors of contemporary discussions on effort, both mental and physical, (Ferrero 1894; Zipf 1972) state that effort always tends to be reduced by the individual: it is the 'principle of least effort' as formulated by Ferrero (1894).



New Urbanism's pedestrian pockets (Calthorpe, 1993) London Moving Walkway (Richards, 1976)

The principle of least effort informed the utility-based models that have been the dominant framework for understanding people's mobility behaviors and modal choices (Lucas et al. 2011). Since the car has for decades represented the ideal of 'effortless' mobility, attempts to provide and promote alternative systems have had to compete with this ideal. Thus 'modal shift' strategies were generally very much centered on the limits of acceptable effort; walkable distances, pedestrian pockets (Calthorpe 1993), and preoccupations with the 'last mile' problem in transit oriented development.

The house for minimum existence was designed not only to respect the floor area constraints but also to minimize the number of steps needed to work in the kitchen.



Existenzminimum, Frankfurt kitchen, Ernst May project, 1926

### Distracting Effort

“A mile is 2,640 steps to go. Slogging through it, counting each step might seem a long mile, but if the person is interested in what he is seeing, thinking, or talking about with a companion, a mile will be hardly a distance at all.”  
(Sussman and Goode 1980, 80)

A second way to consider effort is to divert attention from it. This approach also tends to regard effort as a negative experience, and consists in distracting the inhabitant from the inevitable experience of effort. It accepts the principle of least effort, and suggests tolerating it with entertainment. Ludification, or 'enchantment of walking' transforms the experience of walking by the provision of new affordances and distractions.

As we see in the evidence from interviews, the fastest and the most direct roads are sometimes avoided in favor of more attractive ones.

Within mobility studies and urban projects this approach to effort is the most common one, especially in terms of creating favorable environments. The least effort and distracted effort postulate effort as a negative experience that inhibits the active mobility that is to be reduced or concealed.



Copenhagen, Denmark, 1. 2. Nørrebro road, Topotek 1+BIG Architects+Superflex. 3. Cirkelbroen bridge, Olafur Eliasson.

### Entraining\* Effort

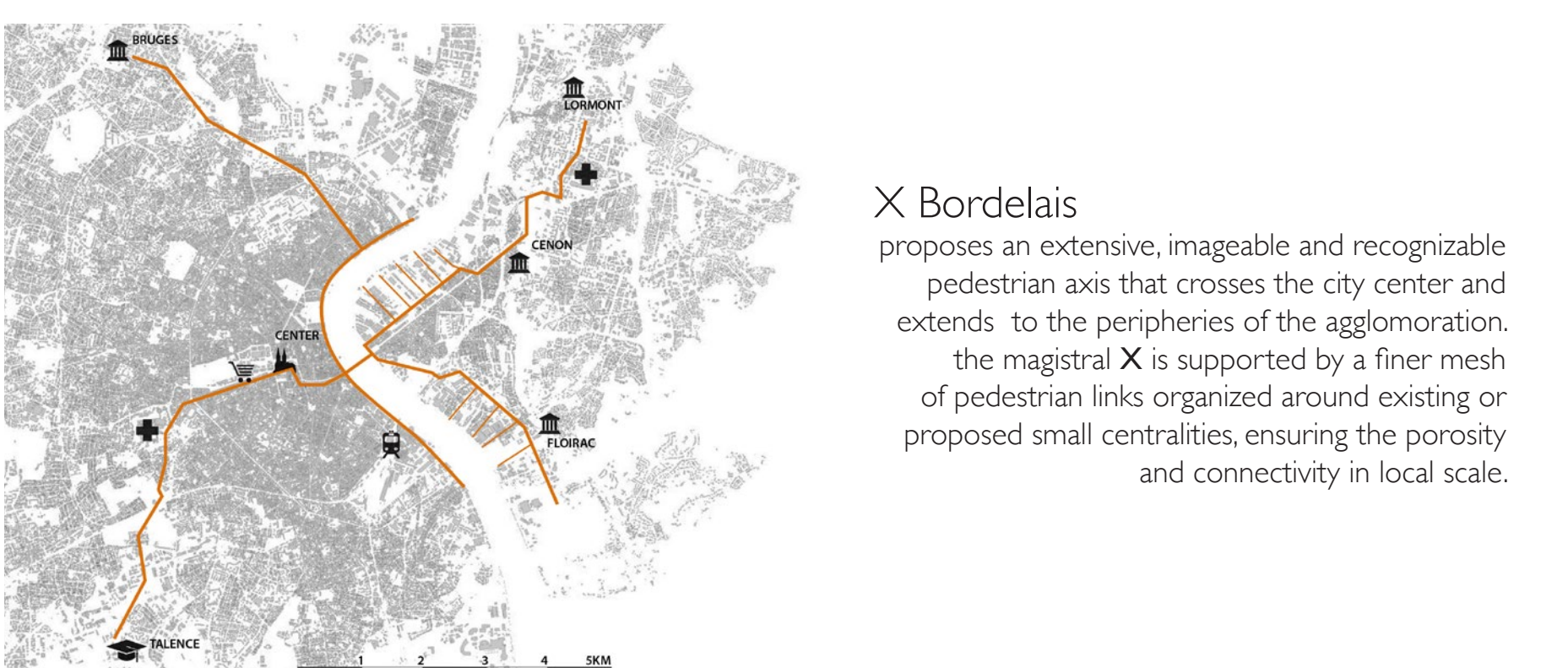
“The effort is toilsome, but also it is precious, more precious even than the work it produces, because thanks to it, one has drawn out from the self more than it had already. We are raised above ourselves. This effort was impossible without matter, by the resistance matter offer and by the docility with which we endow it. It is at one and the same time obstacle, instrument and stimulus. It experiences our force, keeps the imprint of it, and calls for its intensification.”  
(Bergson 1920, 28)

A third perspective, that seems more fruitful in the context of active mobility, links effort to stimulation. The required effort in previous approaches is taken as an obstacle to achievement of a goal - in this case, in a trip from point A to point B. However, effort can be also considered as a rewarding experience, even perceived as positively stimulating. This type of effort results in the further development of skills that facilitate making more effort, what Peter Sloterdijk calls "exercise" or "practice"



Berges du Rhône, Lyon, France. Accommodating diversity of physical activities but rarely used as a part of the daily commutes.

The outcomes of our interviews confirm the positive attitudes for physical effort, namely coming from people's intrinsic motivation for well-being and fitness. However, as interviews show that there is also a certain amount (budget) of effort, which, once spent (in the gym or daily jogging), people are less likely to invest further effort. Thus we question if it is possible to integrate attractive sportive effort into the inhabitants' daily commutes?

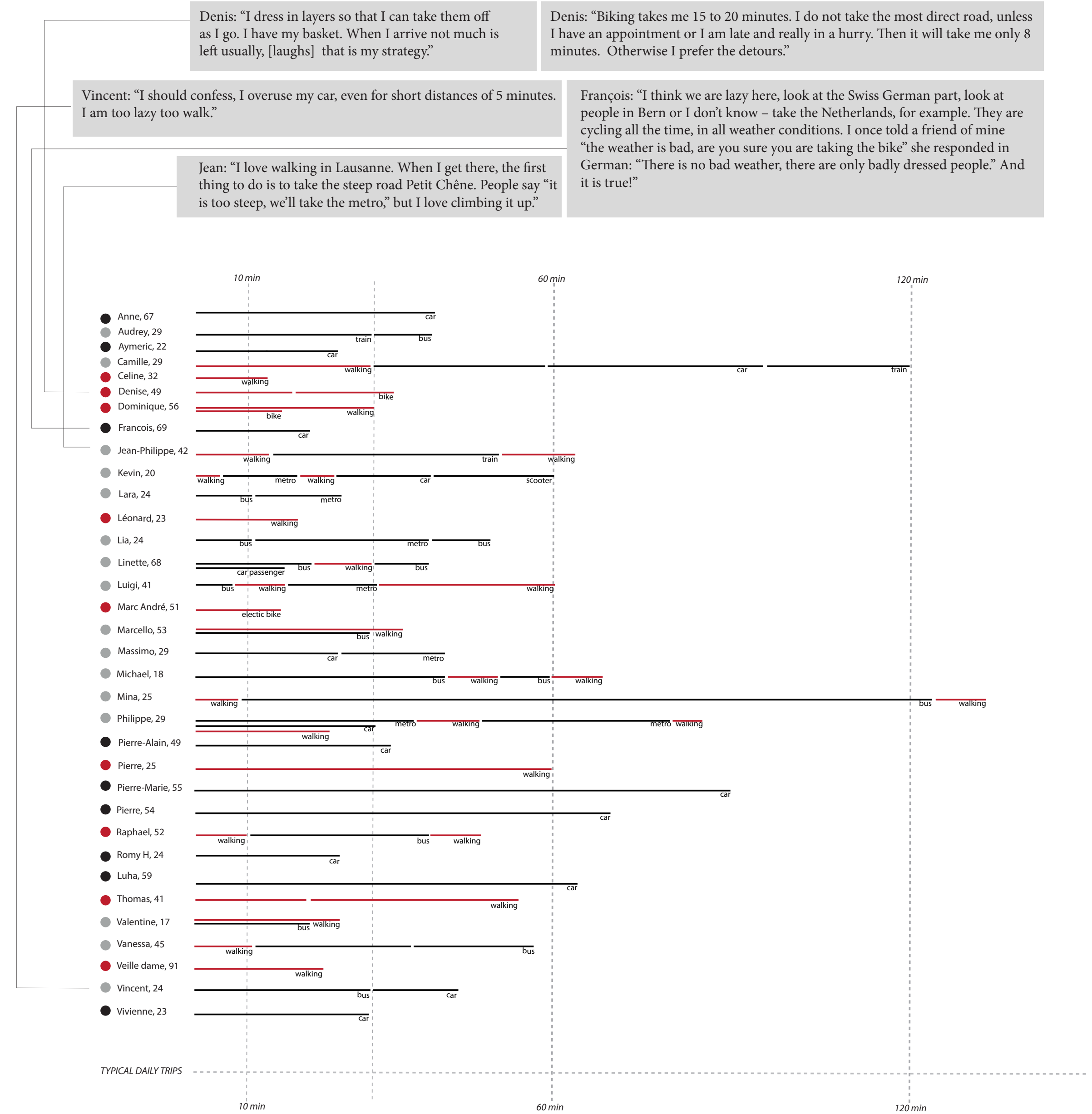
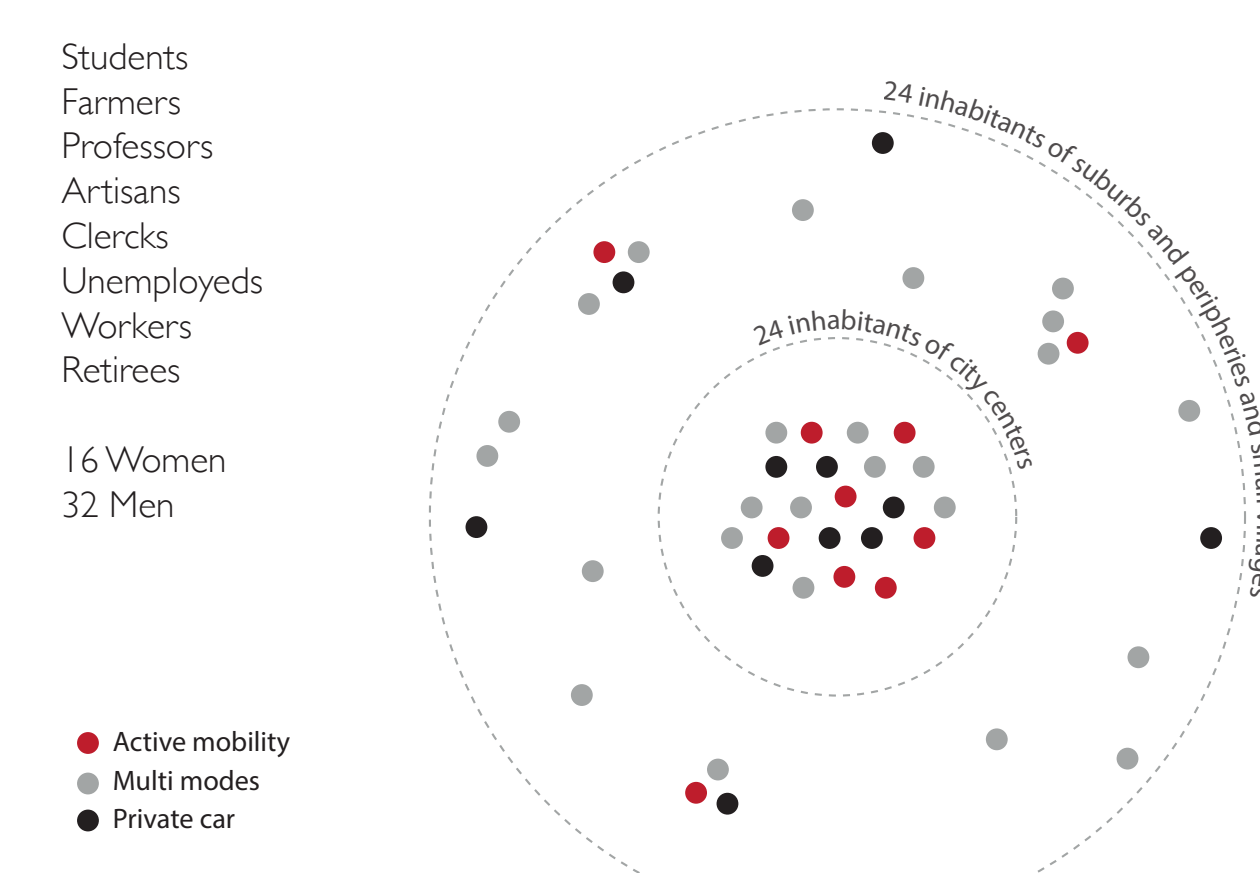


X Bordelais proposes an extensive, imageable and recognizable pedestrian axis that crosses the city center and extends to the peripheries of the agglomeration. The magistral X is supported by a finer mesh of pedestrian links organized around existing or proposed small centralities, ensuring the porosity and connectivity in local scale.

## INTERVIEWS

As a part of our research on future of mobility (postcarworld.epfl.ch) we have conducted 48 interviews with the inhabitants of the centers and peripheries of these agglomerations in 2015. The choice of having inhabitants from different "gradients of urbanity" - city center, suburbs, peripheries, as well as small remote villages - was to reflect the widest possible range of mobility practices in different urban conditions. These semi-directive interviews probe the mobility experiences of these individuals, their daily practices, their attitudes towards active mobility and their projections and aspirations for their future mobility. From the very first interviews the topic of 'effort' emerged and demonstrated its relevance in the experiences of mobility - without any incentive from the interviewees. The analysis of inhabitants' discourses revealed that effort is not always a negative experience, and we therefore propose a three-fold approach in which effort is also sought for its own sake in daily mobility practices.

48 interviews from different urbanities and from different profiles:



Pedestrian accessibility with travel time. Reproduced from Alfred Peter paysagiste's scheme for Bordeaux Plan Pétrot, 2015.

\*To speak of efforts that can be "practiced" as described above, we propose *entraining* effort - borrowing the term from French, *entraînant*. On one hand it implies an engaging and stimulating character, and on the other it suggests a process of training and improvement of skills, as in the entraining of an athlete.