

1. Projects



Theme 1: Lifestyles and bike use

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According to recent research, cycling can allow us to break out of the car paradigm by reinventing our relationship to the world. It therefore offers a way to change values and foster a new relationship with proximity and rhythms of life. What is the nature of the transformations currently under way? Who is leading them?

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Cycling and walking: literature review – Lifestyles and bike use

Cycling is slowly becoming part of urban lifestyles but it is also the subject of many citizen mobilisations. According to academic research, several reasons explain this phenomenon.

Socialisation

The first aspect relates to socialisation. At the level of primary socialisation, riding a bicycle during adolescence promotes the acquisition of enduring positive attitudes towards cycling as well as high levels of cycling skills (Thigpen and Handy, 2018; Thigpen, 2019). These are two aspects associated with choosing to travel by active modes rather than by car (Abasahl, Kelarestaghi, and Ermagun, 2018) and with the more frequent practice of cycling (from Geus et al., 2007).

In terms of secondary socialisation (in adulthood), cycling has become the preferred expression of a certain lifestyle, with the bicycle strongly associated with the idea of sustainable mobility. A whole

world of organisations and associations has appeared around promoting cycling as a means of transport in daily life, gradually bringing users together. These communities are organised around “DIY” repair stations and thereby also attract handy people who practise self-repair (e.g. Rigal, 2021). There is also another more formal community that is structured around measures to (re)integrate vulnerable young people into the labour market, such as professional opportunities in cycling workshops created for this purpose. Cycling is clearly becoming a multifaceted political object that encapsulates the desire for a circular economy, for more inclusive cities and mobilities, as well as anti-capitalist demands (Gillot and Rérat 2022).

For several years, the primary and secondary socialisations of young urbanites have been marked by these pro-cycling mobilisations. In particular, Critical Mass demonstrations, during which hundreds if not thousands of cyclists take possession of the streets to demand a more equitable sharing of roads, have become spaces for young people to become politicised, thus making them more open to other kinds of movements.

The transformation of user attitudes

A second aspect is the transformation of attitudes towards using different modes of transport, favouring of cycling. The image and use of cycling has greatly changed over the last twenty years. Cycling is no longer seen as simply a leisure activity but has become a means of daily transport — one that is healthy and good for the environment. As a result, it generally enjoys a very positive image, with the only downside being the risks involved (in France and Switzerland) (Kaufmann 2021). Beyond these positive views, however, in southern European countries (including France), cycling is now a highly divided means of transport, both spatially and socially, between young and educated urbanites who enjoy cycling on the one hand and disadvantaged urban populations who rarely use it on the other. Moreover, in peri-urban and rural contexts, cycling remains marginal, regardless of social category or age. These social gaps are also found on other continents, like Latin America, where cycling has experienced significant growth over the last two decades, particularly in Mexico, Argentina and Colombia (Pardo et al. 2021).¹ The popularisation of cycling is especially impressive among commuters (Useche et al. 2021).

In Bogotá, a major pioneer of active mobility in South America, this increase in cycling can mainly be attributed to the creation of a cycling culture, linked to citizen movements and proactive public policies (Rosas-Satizábal and Rodríguez-Valencia, 2019). However, it is worth noting that citizen-led cycling movements are mainly found in cities and led by young and educated individuals, showing that cars remain an important marker of social status in this region of the world. Investments in cycling infrastructure tend to be concentrated in middle- and high-income neighbourhoods (Pardo et al. 2021; Parra et al. 2018). Numerous research studies suggest that by massively developing dedicated infrastructures (especially outside the centres), by ensuring their safety and by seeking to meet the aspirations, needs and lifestyles of population groups who are still reluctant to cycle, we can overcome these differences, as the situation in northern European countries suggests.

Dutch, German, Danish and even Japanese cities — small and large (Pucher and Buehler, 2012, ch. 15) — are often cited as models. They are a source of inspiration for cycling urbanism. However, we should not forget that in these cities (at least, for the European ones) as in the rest of the continent, cycling dropped dramatically during the 30 years of economic boom after the end of the Second World War, in favour of cars and motorised two-wheelers. The current situation owes nothing to chance, nor to a particular geographical context, nor even to cultural predisposition (as Pucher and Buehler, 2012 point out, without exploring this further).² First and foremost, it is the result of over forty years of demands voiced by citizen movements (for the Netherlands, Dekker 2021) and of an integrated and coherent policy to promote cycling and walking (Rérat 2019, p. 10). However, it remains hard to differentiate the respective impacts of physical interventions (cycleways, signage, crossings, parking spots) and incentive measures (education, promotion, financial contribution, temporary closures) on the promotion of cycling in these exemplary regions (Forsyth and Krizek 2011). More and more researchers

agree that the success of certain policies depends primarily on the multiplication of measures at these different levels. Several studies also show that a policy to promote cycling is much more effective when it is accompanied by measures that discourage car use (Hull, 2010; Berent & Yoshida, 2017; Pucher and Buehler, 2008; Pucher, Dill, & Handy, 2010) and when a modal shift to public transport is facilitated. Finally, we can point out that the proportion of bicycle trips in the cities at the forefront of cycling urbanism – such as Copenhagen and Amsterdam – has continued to rise considerably over the past three decades³ thanks to continuous pro-cycling policies and significant investments to accompany them (Pucher, Buehler, 2021; Koglin, te Brömstromelet et van Wee 2021).

Although cited less frequently, Japan is nevertheless a pioneering country in terms of cycling. The mass adoption of cycling was not the result of national or local pro-cycling public policies, but rather it emanated from a particular sociocultural context in which cycling is particularly valued (Steele, 2012; Martial et al. 2019; Lagadic, 2022). Japan is unique in that the majority of cyclists are women (Goel et al., 2021), and this is despite the absence of high-quality infrastructure dedicated to cycling and despite the continuing unequal distribution of household tasks between men and women; these two elements are usually decisive factors for an egalitarian practice of cycling (see on this subject, Theme 2, section “Gender”). In Japan, the main purposes of trips performed by bicycle are of a private nature, often related to childcare (Lagadic 2022). This distinctive feature of Japan confirms the relevance of conducting comparative studies to understand the potential drivers for promoting cycling in different geographical and sociocultural contexts.

Road planning

A third aspect relates to how road infrastructure and layout encourages cycling. There is already extensive research on cycling infrastructure and experience shows that to increase bicycle use, cycling networks with high quality infrastructures are needed (Dill and Carr, 2003; Akar and Clifton, 2009; Schoner and Levinson, 2014). Cycle paths that are separated from car traffic or that are even on dedicated lanes are more reassuring and play a decisive role in popularising cycling (Gårder, Leden, and Pulkkinen, 1998; Howard and Burns, 2001; Habib et al., 2014; Pucher and Dijkstra 2000; Pucher and Buehler 2008). These distinct and secure infrastructures are crucial for promoting cycling among non-cyclists, especially women, senior citizens, and children (Dill 2009; Pucher and Buehler, 2012, ch. 15; Furth 2011; Elvik 2021; Aldred et al. 2017; Winters and Zanotto 2017). Cyclists also tend to prefer routes on dedicated paths, rather than shorter alternative routes (Lu, Scott, and Dalumpines, 2018).

In response to the Covid 19 pandemic, many cities and urban areas in Europe established infrastructures and measures inspired by tactical urbanism, to promote mobilities that facilitate social distancing and to avoid increasing the use of private cars. These observations form the starting point of a research project that several EPFL research laboratories carried out during 2021 (Fritz et al. 2022). The goal of this project was to analyse how an urban planning approach based on temporary and small-scale interventions, deployed in a crisis context, can advance more long-term policies aimed at decarbonising mobility, and thus open up perspectives and opportunities for a transition towards urban sustainability. The study, focused on Geneva and Lyon, demonstrated that cycling infrastructure implemented during the Covid pandemic allowed new practices to emerge and to be maintained in the long term, particularly in Lyon where these measures were ambitious (Meinherz et al. 2022).

Furthermore, the proximity of self-service bike stations combined with the availability of bike paths augments people’s motivation to cycle (Dill and Voros, 2007; Faghih-Imani and Eluru, 2016; Kabak et al., 2018). For some authors, identifying these links shows the importance of introducing a new planning model based on cycling urbanisation. According to Rérat (2019, p. 9) “cycling urbanism includes methods, infrastructures and amenities (hardware) as well as measures aimed at legitimising cycling in the mobility system (software).”

Residential location

Cycling as a means of everyday transport remains largely an urban practice. As an exception to this rule, the proportion of cycling trips is almost identical in suburban peripheral areas, small towns and villages as it is in the centre of large cities in Germany, Austria, Switzerland or even the Netherlands (Buehler et al. 2017). However, the type of urbanisation at play generally appears to be an important differentiating factor (Heinen, van Wee and Matt 2010; Buehler and Pucher 2021 ch.2; Koglin, te Brömmelstroet and van Wee 2021). Many authors agree that the density and diversity of urban fabrics, and indeed the distances that need to be covered, play an important role in how likely a person is to ride a bike. But this modal choice also depends largely on socio-economic factors. In this context, the exact role of the built environment in modal choices remains hard to measure (Krizek, 2012).

While there are indeed many studies on the influence of the built environment on active mobilities, Franck Hess' thesis shows that we cannot rely on this alone to significantly increase the use of active modes among the population. This is because — especially in the suburbs — we observe that peoples' attitudes modulate the influence of the built environment on active mobility. He concludes that, in order to fully understand people's mobility behaviours, we must consider both the built environment and people's attitudes simultaneously (Hess, 2018).

Proximity to green spaces and leisure areas, schools, universities, museums, shopping centres, sports areas, restaurants, hotels and transfer hubs also favours the use of self-service bicycles (Kaltenbrunner et al., 2010; Kabak et al., 2018; Wang et al., 2018). People therefore have varying degrees of accessibility depending on where they live. However, the trend (in developed countries) to expand self-service bike stations into disadvantaged neighbourhoods (Buck et al., 2013) can significantly increase cycling in these areas (Goodman and Cheshire 2014).

Finally, it has been observed that, depending on the geographical context, individuals perform trips that vary greatly in terms of distance (Pucher and Buehler, 2008). A recent comparative study conducted by an international group of researchers (Goel et al. 2021) nevertheless showed that 50-60% of trips (all modes combined) were less than 5 km. The question of local urban living, which is enabled by a dense and diverse fabric, remains a key factor worth leveraging to promote active modes.

Table of contents of the literature review

Theme 1: Lifestyles and bike use

Theme 2: Cycling and social differentiations

Theme 3: The potential of walking for modal shift

Theme 4: The pedestrian as a subject

Theme 5: The experience of walking and cycling

Theme 6: User conflicts between active modes

Theme 7: Walking and cycling as complementary to public transport

Theme 8: Urban rhythms and the mobility of pedestrians and cyclists

Conclusions

Bibliography

Notes

1 It should be noted that Brazil remains a country where cycling remains a marginal mode, with a modal share around 1%, which is comparable to the United States (Goel et al. 2021)

2 Garrad (2021) identifies a cultural difference between the Netherlands and the Anglo-Saxon countries in bicycle use with regard specifically to functional or utilitarian trips. Koglin, te Brömmelstroet and van Wee (2021) also note that the post-war decline of cycling was however less pronounced in Copenhagen and Amsterdam than in other European cities. They also claim that in these cities, cycling has always attracted a diverse population — in terms of gender, age, and income.

3 In Copenhagen, bike trips increased from 22% to 29% between 1995-2016. In Amsterdam, they increased from 21% to 31% between 1990 and 2017.

Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

En savoir plus x

Lifestyle

A lifestyle is a composition of daily activities and experiences that give sense and meaning to the life of a person or a group in time and space.

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Active Mobility

Active mobility refers to all forms of travel that require human energy (i.e. non-motor) and the physical effort of the person moving. Active mobility occurs via modes themselves referred to as “active,” namely walking and cycling.

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