Theme 2: Cycling and social differentiations

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Many studies show the ambivalence with which cycling is perceived, alternately seen as a leisure and a transport mode, sometimes viewed as a poor person's vehicle or on the contrary as the positive expression of a young and environmentally sensitive lifestyle. How are cycling differentiations expressed according to social environments and socio-demographic categories? What are the different profiles of cyclists today and what are their respective needs?

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Cycling and walking: literature review – Cycling and social differentiations

Before getting to the heart of the matter, we must first note that in France, nearly one in two individuals aged 15 or over do not own a personal bicycle. [1] And among those who do, only 61% of those bicycles are in good working order (Active Mobility Observatory, 2013, p. 3). In addition, 6.1% of French people say they do not know how to ride a bike and 15.6% admit to not knowing how to use it properly (Active Mobility Observatory, 2013, p. 4). According to France's 2019 Personal Mobility Survey, 2.6% of local trips prior to Covid were mainly carried out by bike. Cycling seems to be more sensitive to seasons and terrain than walking; it is also more used more in cities that have cycling infrastructures.

In terms of differentiating factors for bicycle use, research shows that age, gender, social position and cycling skills are powerful markers.

Age

Overall, senior citizens represent a small proportion of cyclists on an international scale. However, some studies show that the age-related decline in cycling occurs later in life in places with a well-established cycling culture, such as in the Netherlands, where the drop-off in cycling is only noticeable at the age of 70 (Götschi et al., 2015, Goel et al. 2021). According to Goel et al, this phenomenon is even more pronounced when making comparisons at the national level (rather than between cities), which suggests that cultural factors play as important a role, if not more so, than cycling infrastructure at the local level. However, there is a wealth of evidence that physical exercise, such as practising an active mobility, has health benefits for senior citizens who suffer from cardiovascular diseases, diabetes, dementia, loss of balance or social isolation, among others. Older cyclists are generally put off by uphill slopes as well as by high traffic volume and/or speed (Misra and Watkins, 2018). Their tolerance threshold for risk — whether real or perceived — associated with cycling is also lower. But if their safety and comfort are ensured, they are able to cycle well beyond the age of 65 (Pucher and Buehler 2012 ch.1, Garrard et al. 2021). The recent development of bikes that are more adapted to their needs (electric bikes, tricycles, Sofie e-bikes) also encourages this growing segment of the population to travel in this way (Garrard et al. 2021).

The issue of safety is also an important barrier to cycling for children. For a child, learning to ride a bike is beneficial on various levels, in particular because it gives them more independence and widens the perimeter of where they can travel. Cycling, as a physical activity, also has health benefits for children and adolescents, who increasingly suffer from problems associated with a sedentary lifestyle.

However, in most countries, cycling among children and young people has been declining for several decades (McDonald, Kontou and Handy, 2021, Schmassmann, Baehler, Rérat, 2019). With regard to children's utilitarian trips such as commuting to school, parental motorised transport is increasingly replacing active modes, for multiple reasons such as security, privacy, time pressure on families, or the networks of daily life (European Commission 2002; Fotel and Thomsen 2003). Fortunately, despite this growing trend, walking and cycling remain, for now, the main means of transport for children for these trips. In some countries or cities that have invested massively in cycling policies, we even find that more children cycle to school than walk (McDonald 2012).

However, numerous studies point to an increasingly late onset of independent active mobility — i.e. not supervised by an adult — in several western European countries over the last few decades (O'Brien et al. 2000; River 2016; Shaw et al. 2013; Skår et Krogh 2009). Securing and improving children's cycling journeys, through adapted facilities, good quality cycling networks throughout the neighbourhood, and awareness-raising programs, could help reverse this trend. Temporary measures, such as making certain roads leading to schools pedestrian-only at peak hours, or supervised trips such as Barcelona’s Bicibus, can also encourage cycling among young people. Other factors, such as topography or distance, are significant barriers to practising an active mode for children and are harder to overcome (Mc'Donald 2012).

Finally, from around the age of 10, trips made by children seem to be influenced by what is in fashion. Thus they will gladly experiment with scooters, skateboarding (or other kinds of boards), roller skates, etc. Children therefore learn to master different uses of public space, becoming familiar with the pleasure of actively moving around.

Gender

But age alone does not determine the potential for cycling. Indeed, apart from senior citizens and children, women are among the groups who are most concerned with safety issues and risks associated with road traffic (Garrard, Rose et Lo 2008; Garrard, Handy and Dill 2012; Aldred and Crossweller, 2015). Perceived dangers include traffic hazards, as well as the risk of assault (Garrard, Handy, and Dill 2012; Garrard, Crawford, Hakman 2006; Emond, Tang, and Handy 2009), which is a major obstacle particularly in South American and Indian cities (Pardo et al. 2021; Pucher et al. 2021; Pucher et al.2007; Rathi 2017). The discrimination and criticism directed at cyclists in general and even

more so at female cyclists, and to the manner in which they cycle (slow, insecure, taking up too much space, etc.) also factor into their hesitation to opt for this mode of transport (Carrard, 2021).

Significantly more women than men never learn to ride a bike, and those who have access to one, on average, learn to ride at a later age (39.8% learn before the age of 6 compared to 47.2% for boys) (Active Mobility Observatory, 2013). This discrepancy is compounded by the fact that considerably more women quit cycling during adolescence (Bonham and Wilson, 2012; Goddard and Dill, 2014; Underwood et al., 2014; Sayagh, 2018). Teenage girls are more subject to injunctive social norms, pressuring them to take care of their appearance, to avoid physical activity and risky behaviours, and to shun travelling alone or venturing outside. As a result, they do not have the same opportunities for cycling as boys (Sayagh, 2018; Horton 2007; Jacobsen, Raccioppi, and Rutter 2009, Whitehead and Biddle, 2008). More generally, women feel more embarrassed than men with regard to cycling: their hair gets messed up in helmets, their skirts get caught in the chain or are too revealing, female body odours are less acceptable, etc. According to Jan Garrard, a specialist on the subject, the effects of sociocultural influences on women's bicycle use remains insufficiently addressed in scientific research (Garrard, 2021).

The general modal share of cycling also plays an important role in the proportion of women cyclists. In particular, recent international comparative research shows that women are just as likely as men to cycle in cities and countries where the modal share of cycling is high [2] (Goel et al. 2021, Buehler et Pucher, 2021 ch.2). Several researchers have thus observed a higher proportion of women cyclists in central and northern European countries (the Netherlands 54% in 2016, Denmark 52% in 2017, Sweden 50% in 2014, Germany 49% in 2017), as well as in Japan (55% in 2015), which are pioneers in terms of cycling facilities and policies (Buehler and Pucher, 2021, ch.2). In general, comparative studies show that contexts where the modal share of cycling is high are also those with a greater diversity of cyclist profiles, whether in terms of gender or age (Götschi et al., 2015; Goel et al. 2021).

Other studies show a direct correlation between the quality of cycling facilities and the proportion of female cyclists (Grudgings et al., 2018). These findings show that the presence of bike-friendly infrastructure has a direct impact on women's appropriation and practice of this mode of transport. However, this infrastructure has to be adapted to their needs. Indeed, the development of cycling infrastructure cannot be directly correlated with greater diversity among users (Aldred et al 2016). Women do not behave in the same way as men and therefore do not have the same preferences when it comes to cycling facilities (Dill and Gliebe 2008; Garrard, Handy and Dill 2012). In particular, they tend to make shorter and more complex trips than men (Garrard, Rose, et Lo 2008; Gossen and Purvis 2005, Sersli et al. 2020, Ravensbergen et al. 2020) and are less likely than men to cycle for commuting purposes, such as going to work (Krizek, Johnson, and Tilahun 2005; Tin, Woodward, Thornley, and Ameratunga 2009). The question of cycling at the scale of the neighbourhood and of local cycling trips therefore needs to be addressed in order to meet women's expectations (Goel et al 2021; Garrard 2021).

The social position

Generally, households with lower incomes and education levels have more limited access to bike-sharing services (Ursaki and Aultman-Hall, 2016; Braun et al., 2019), while regular users, who subscribe to these services, are mostly male, young, educated, professionally active and with high incomes (Fishman et al., 2014; Ricci, 2015). Also in terms of social position, we find that the gender gap described above is mitigated among people with high cultural capital, who are more likely to respond to current injunctions by deploying the bicycle as a tool for social distinction, showing respect for the environment and taking control of one's body and health (Sayagh, 2018; Biernat et al., 2018). Conversely, women from disadvantaged backgrounds, especially immigrants from developing countries, are especially likely never to have learned to ride a bicycle (Segert and Brunmayr, 2018), including in the Netherlands (Harms 2007; Martens 2013) which is one of the few countries where women cycle as much as if not more so than men (Pucher and Buehler, 2008). Notable differences

between ethnic groups have also been identified in the United States where the vast majority of bike trips are performed by white Americans, as categorised by the US Census Bureau (Martens, Golub, and Hamre 2021). According to the same study, these disparities can be explained, among other things, by the fact that these different groups do not have equal access to infrastructure, wherever they live. In France, there is also a particularly strong gender gap in the most disadvantaged urban neighbourhoods (known as QPVs, for quartiers prioritaires de la politique de la ville), where the norms of male appropriation of public space are especially pronounced (Clair, 2008; Lapeyronnie and Courtois, 2008; Oppenchaim, 2011; CGET, 2016). Cycling as a mode of transport is very much associated with poverty and childhood. While cycling tends to promote boys' appropriation of public space, it is often unwelcome among girls and young women, whose mobility is particularly monitored and restricted (Sayagh, 2018). This finding is all the more alarming because the obesity rate is particularly high in priority neighbourhoods, and even more so among women (Jung et al., 2018).

User skills

Regardless of the demographic categories mentioned above, we must now look at the different skill levels of cyclists and their respective infrastructure needs. Some operational documents make a distinction between "experienced" cyclists, who prefer speed and are comfortable in traffic, and "ordinary," less confident cyclists (Forsyth & Krizek, 2011). In addition to these two main categories, there are children and the elderly, who have already been mentioned above. These different user groups require different cycling conditions. However, recent studies show that cycling planning policies tend to focus on "busy commuters," investing mainly in measures aimed at functionally optimising the cycling networks for these users and, in particular, by establishing fast cycle lanes (Goel et al. 2021; Forsyth & Krizek, 2011). Confirming the existence of these inequities, Roger Geller (2009) developed a typology of cyclists according to their skills and identified the proportion of each group in the cycling population in the city of Portland, Oregon: "strong and fearless" (1%) — "enthused and confident" (6%) — "interested but concerned (60%) — "no way, no how" (33%). At the time of his study, he criticised the fact that planning measures generally focused on "enthused and confident" cyclists and therefore ignored the majority of the population. These findings should lead policy makers and planners to invest more heavily at the neighbourhood level and on school routes, but also to pay more attention to the quality of cyclist experiences, considering their full diversity.

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Notes

1 In comparison, 80% of the Danish population owns a bicycle (Nielsen et al. 2013; Nielsen and Skov-Petersen 2018).

2 The critical limit is around 7% of trips made by bicycle according to the study by Goel et al. In particular, the second study identifies Denmark, the Netherlands, Germany, Sweden and Japan as countries where this observation holds true. Finally, Baker (2009) claims that women can be seen as valuable indicators that an environment is favourable to cycling.

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

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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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.

En savoir plus x

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