

1. Research notes



Tactical cycling urbanism and the health crisis

Research notes

Begin: September 2023

End: September 2023

In the spring of 2020, the Covid-19 pandemic prompted public authorities to rethink the use of public space, particularly roads, in order to develop means of transport that are both efficient and adapted to the health situation. Fearing that people would desert public transport and shift massively to cars, decision-makers in Europe, North America and South America turned to active modes, such as cycling, which quickly became seen as an adapted means of transport for ensuring minimum social distancing recommendations. Public authorities thereby implemented, with great urgency and varying degrees of success, temporary cycling infrastructures, known as "coronalanes" in France, in order to better cope with increasing cycling practices during the pandemic (Nurse and Dunning, 2021; Ortar and Rérat, 2023). Faced with strong demand to make these developments permanent, they have since made significant commitments in this direction.

Research participants

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This portfolio was produced with the VÉLOTACTIQUE project ¹, funded by the French National Research Agency, which aims to provide professionals and researchers with knowledge on the implementation and reception of tactical cycling urbanism in the context of the health crisis, as well as its contribution to the energy transition. Tactical urbanism is a mode of intervention that relies on temporary, reversible and inexpensive material transformations, likely to lead to rapid changes in the use and appropriation of urban public space (Lydon and Garcia, 2015; Thomas, 2023).

The research project is based on comparative work carried out in France in the cities of Besançon, Grenoble, Montpellier, Lyon, Paris, Rennes, and Saint-Étienne, in Switzerland in Lausanne and Geneva, and in the Americas, in particular in Montreal and Bogota. In order to develop this portfolio, we drew upon the results from the case studies of Lyon, Montpellier, Rennes and Bogota.

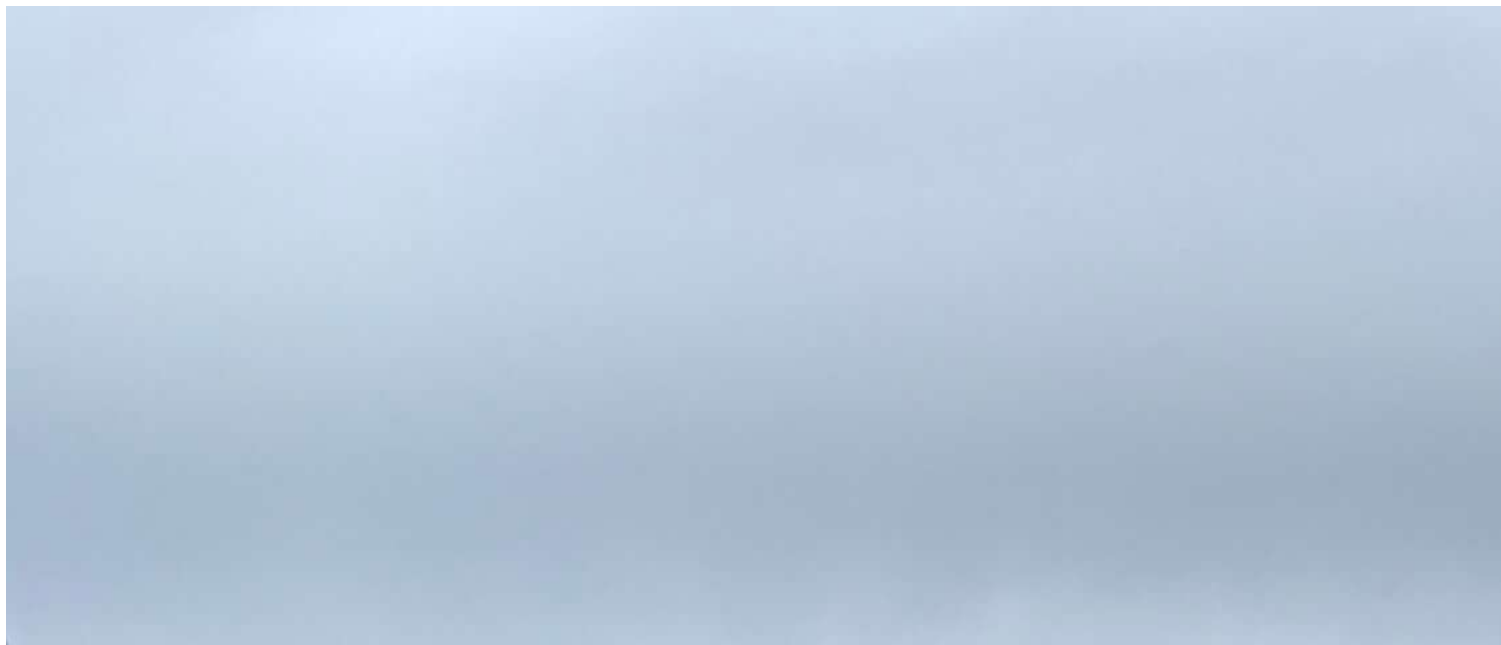
The photographs presented in this portfolio were taken in 2020 and 2021 by the researchers involved in the VÉLOTACTIQUE project in order to document the implementation of tactical urbanism. At a time when the health context made it difficult to travel and organise meetings, the first goal of these photographs was to grasp the diversity of forms that temporary cycling installations can take, in order to establish the terms of the comparison between the various situations that were being observed in the different fields of research.

1. Diversity of forms, economical means and increase in uses

In the French cities studied, the temporary installations are generally simple yellow markings on the ground – in order to accentuate their temporary nature – occasionally accompanied by self-raising road markers, also yellow (Photograph 1). In such cases, one automobile lane is removed (Photograph 2).



Photograph 1: Montée de la Boucle, Lyon, April 2020, credit Nathalie Ortat (researcher)







Photograph 2: Avenue des Érables, Le Rheu (periphery of Rennes), December 2020, credit Nicolas Bourgeais (researcher)

In Bogota, the temporary lanes are delimited by simple removable construction separators and are, most of the time, installed in the centre of the roadway in order to avoid conflicts with parked vehicles or vehicles turning right at intersections (Photograph 3).

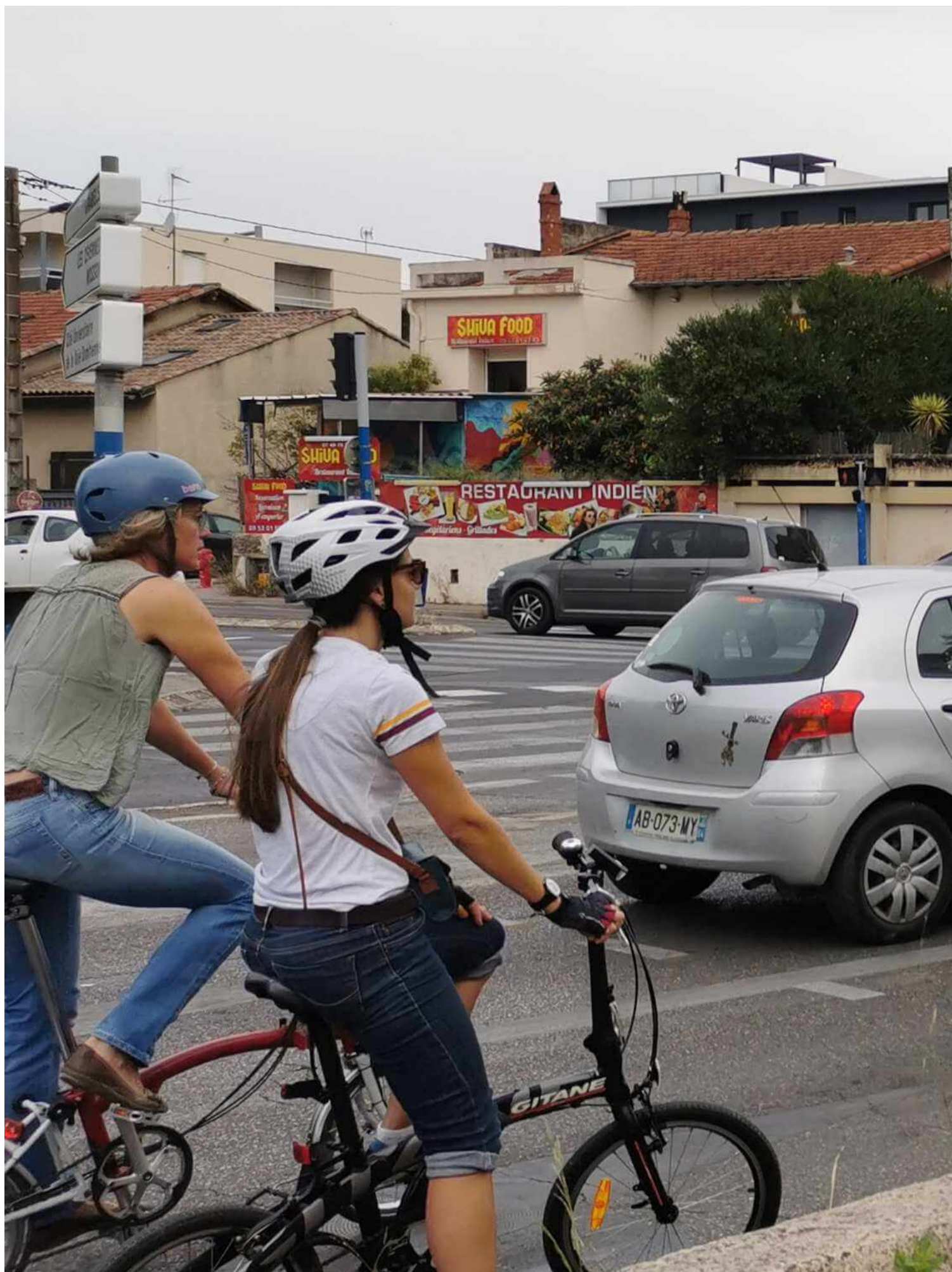






Photograph 3: Avenue Carrera 68. Bogotá, April 2021, credit Maëlle Lucas (researcher)

In all the cities studied, the deployment of temporary cycle lanes during the pandemic (77 km in Greater Lyon, respectively 22, 23 and 84 km in the cities of Montpellier, Rennes and Bogotá) led to the reallocation of public spaces previously reserved for cars, which was frustrating for many motorists who were thereby impacted by a local increase in road congestion. The Covid-19 pandemic thus accelerated the transition towards a more balanced sharing of the road system, in favour of active modes and to the detriment of motorised modes. As such, it enabled authorities to allocate more public space to cycling and therefore attract new users. In Lyon, the number of cyclists had been steadily growing for several years and the pandemic enhanced this trend (38 million bicycle trips recorded in 2021, 42 million in 2022). In the metropolitan area of Montpellier (Photograph 4), permanent meters have shown a 14% increase in cycling between 2021 and 2022. In Rennes, the city's mobility services have observed a 66% increase in cycling between 2019 and 2021. In Bogotá, after a cycling peak at the end of the lockdown and until December 2020, the modal share of cycling stabilised around 10% at the end of 2021, i.e. an increase of 41% between 2019 and 2021.





Photograph 4: Avenue Charles Flahault, Montpellier, April 2021, credit Adrien Poisson (researcher)

2. User conflicts and feeling of insecurity: the limits of tactical cycling urbanism

By allocating more space to cycling during the health crisis, public authorities wanted to ensure cycling safety and fluidify cycling traffic. However, this goal was only partially achieved due to the urgency and scale at which these cycling installations were deployed, as well as to the low level of resources allocated to these projects compared to the usual modalities of public infrastructure measures.

On many coronalanes, most of which have now been made permanent, cyclists share their lane with buses and taxis, due to a lack of sufficient road surface to keep the modes completely separate. On rue de l'Hôtel Dieu in Rennes, the local cycling associations first welcomed the public decision to reallocate a lane that was initially dedicated to cars in order to create the first coronalane in Rennes exclusively reserved for cyclists and separated from other traffic by self-raising beacons (Photograph 5). However, the city quickly had to contend with the need to keep public transport flowing, which led the authorities, in November 2020, to allow buses back onto the space temporarily allocated to bicycles (Photograph 6).

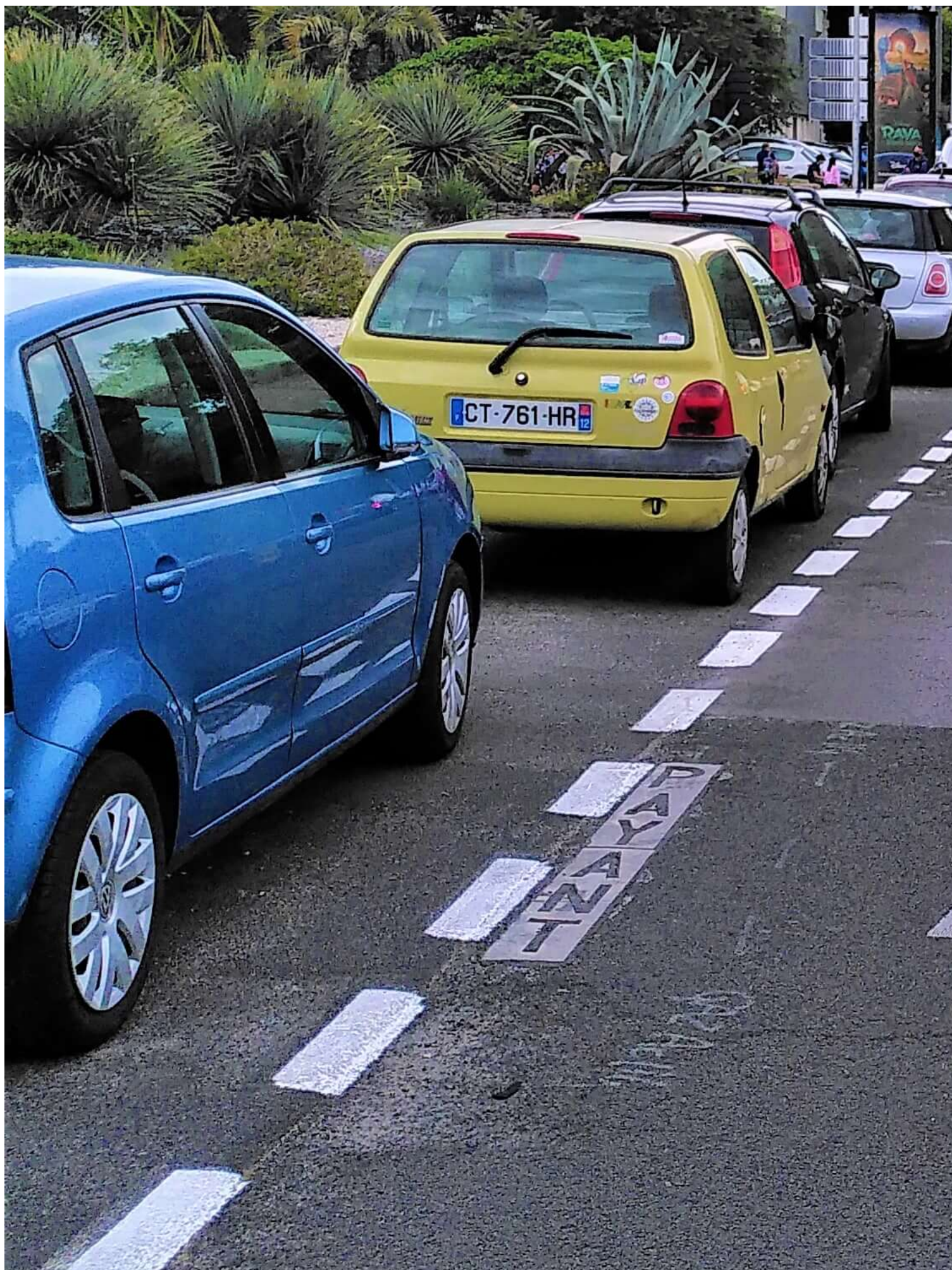


Photographs 5 and 6: Rue de l'Hôtel Dieu, Rennes, photo on the left May 2020, credit "Rayons d'Action" association / photo on the right November 2020, credit Nicolas Bourgeois (researcher)

Such situations, where cyclists coexist with motorized modes on the same lane, can lead to conflicts, due to speed differentials and the complexities of overtaking. On this matter, the interviews carried out within the framework of the VÉLOTACTIQUE project reveal a strong feeling of insecurity among cyclists on shared bus/bike lanes.

The absence of a physical road separator (concrete curbs, fixed cones, etc.) leads to conflicts with other vehicles (cars, utility vehicles, trucks, etc.) that illegally drive or park on the coronalanes, thus reducing the safety gains provided by the differentiated lane allocation (Photograph 7).







Photograph 7: Avenue Charles Flahault, Montpellier, June 2021, credit Adrien Poisson (researcher)

Since intersections were originally laid out and designed for motorised modes, they are a major safety concern for cyclists. They increase their vulnerability because cyclists are sometimes forced to stop or swerve onto non-dedicated lanes used by vehicles traveling at high speeds (Photograph 8).







Photograph 8: Avenue Américas, Bogota, March 2021, credit Maëlle Lucas (researcher)

Intersections, which are always tricky to manage, lead to the construction of installations that are hard to understand and potentially dangerous, such as the central bus-bike lane on boulevard Garibaldi in Lyon, meant to allow cars to stop at the traffic lights before turning at the next intersection (Photograph 9). Thus, certain temporary installations that were hastily set up after the health crisis raise issues about their integration into pre-existing cycle networks, the readability of their road markings and their ability to ensure the safety of cyclists.



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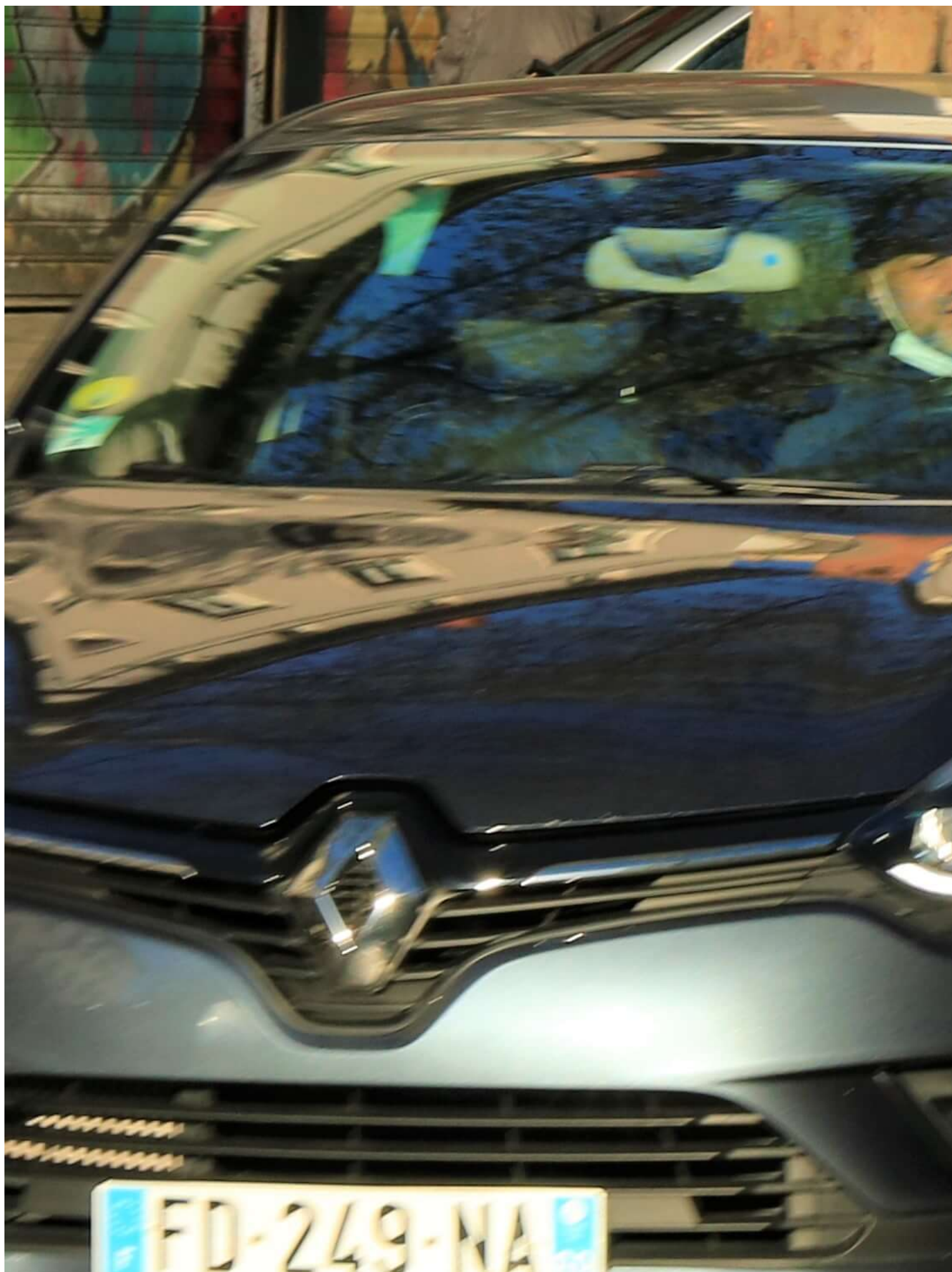
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Photograph 9: Garibaldi Guillotière, Lyon, April 2020, Nathalie Ortar (researcher)

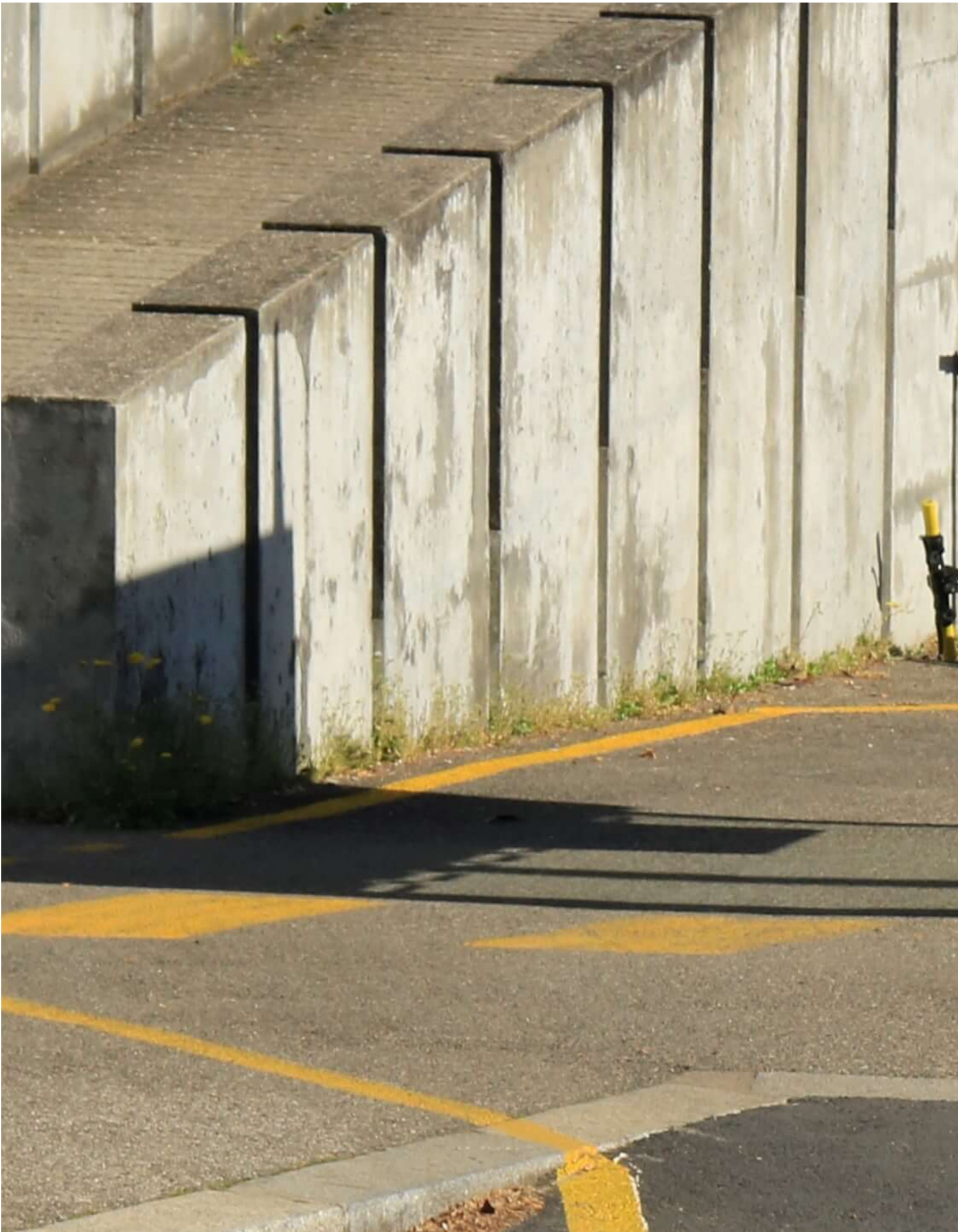
The result is that while tactical cycling urbanism is, by nature, cost-effective, it should at the very least ensure cycling safety. And yet, this is not always the case. Here we reach the limits of such a system (Photograph 10).

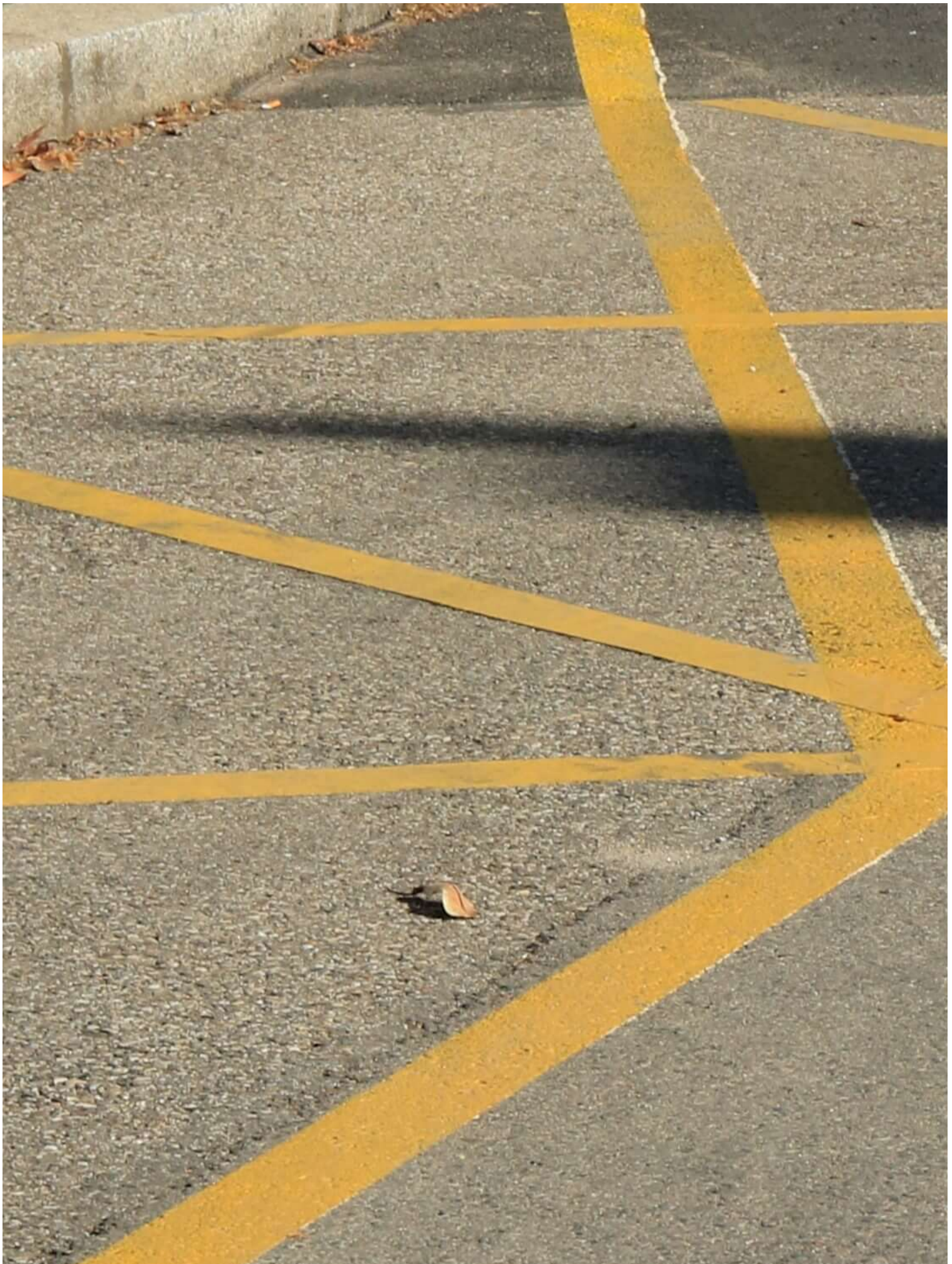


Photograph 10: Intersection of rue de Bellevue and avenue de la Grande Fontenelle, Cesson-Sévigné in the periphery of Rennes, January 2021, credit Nicolas Bourgeais (researcher)

The growing number of cyclists is undoubtedly one of the positive consequences of the recent health crisis. Overall, this trend increased the population's practice of an active mode and contributed to improving air quality in the city. Meanwhile, coronalanes have also sometimes reduced conflicts with pedestrians by reallocating the full width of sidewalks to pedestrians and transferring cyclists to the

roadway. But this hasn't always been the case. In Lyon, around Montée de la Boucle, the temporary installations encroach on spaces allocated to pedestrian traffic, which is a source of conflict (Photograph 11).







Photograph 11: Bus stop, Montée de la Boucle, Lyon April 2020, credit Nathalie Ortar (researcher)

Due to a lack of suitable facilities, conflicts between cyclists and pedestrians persist. In Montpellier, on avenue de Nîmes, pedestrians and cyclists cross paths in a restricted space strewn with obstacles (curbs and bollards), due to the lack of a continuous and safe cycle route (Photograph 12).



Photograph 12: Avenue de Nîmes, Montpellier, September 2022, credit Adrien Poisson (researcher)

In Rennes, on boulevard d'Armorique, an ambiguous end to the installation forces cyclists to go back onto the pedestrian path, which frequently leads to this portion of the installation being avoided (Photograph 13).



Photograph 13: Boulevard d'Armorique, Rennes, June 2021, credit Léa Barbé (researcher)

The mass deployment of coronalanes during the pandemic led to a much faster realization by public authorities of the importance of thinking in terms of networks and no longer of sections.

3. Trends accelerating with tactical cycling urbanism: coronalanes progressively becoming permanent

As their name suggests, temporary installations are meant to disappear, and if not, to become permanent. It is towards this second solution that the cities in the study have turned more or less quickly.

In many cases, this has simply meant getting rid of temporary separators and replacing the yellow road markings with white markings that road users are more commonly accustomed to identifying (Photographs 14 and 15).



Photographs 14 and 15: Intersection of Flahault - Voie Domitienne, Montpellier, photo on the left 2020 / photo on the right 2022, credit Adrien Poisson (researcher)

But sometimes, this transition to more permanent installations has occurred through more ambitious developments. In Bogota, the temporary cycle lane on Avenue Carrera Séptima is the first to have been made permanent in 2020 (Photograph 16). It is a strong symbol of how cycling practices have been taken into account, since it is located on a major road connecting to the city centre, which is often used by the well-to-do inhabitants residing further north. It secures a main road that many cyclists already use - keeping them away from dense motorised traffic - and on which many buses come and go, making stops. Its location in the middle of the road, however, limits cyclists' ability to exit the lane and increases the risk of accidents.







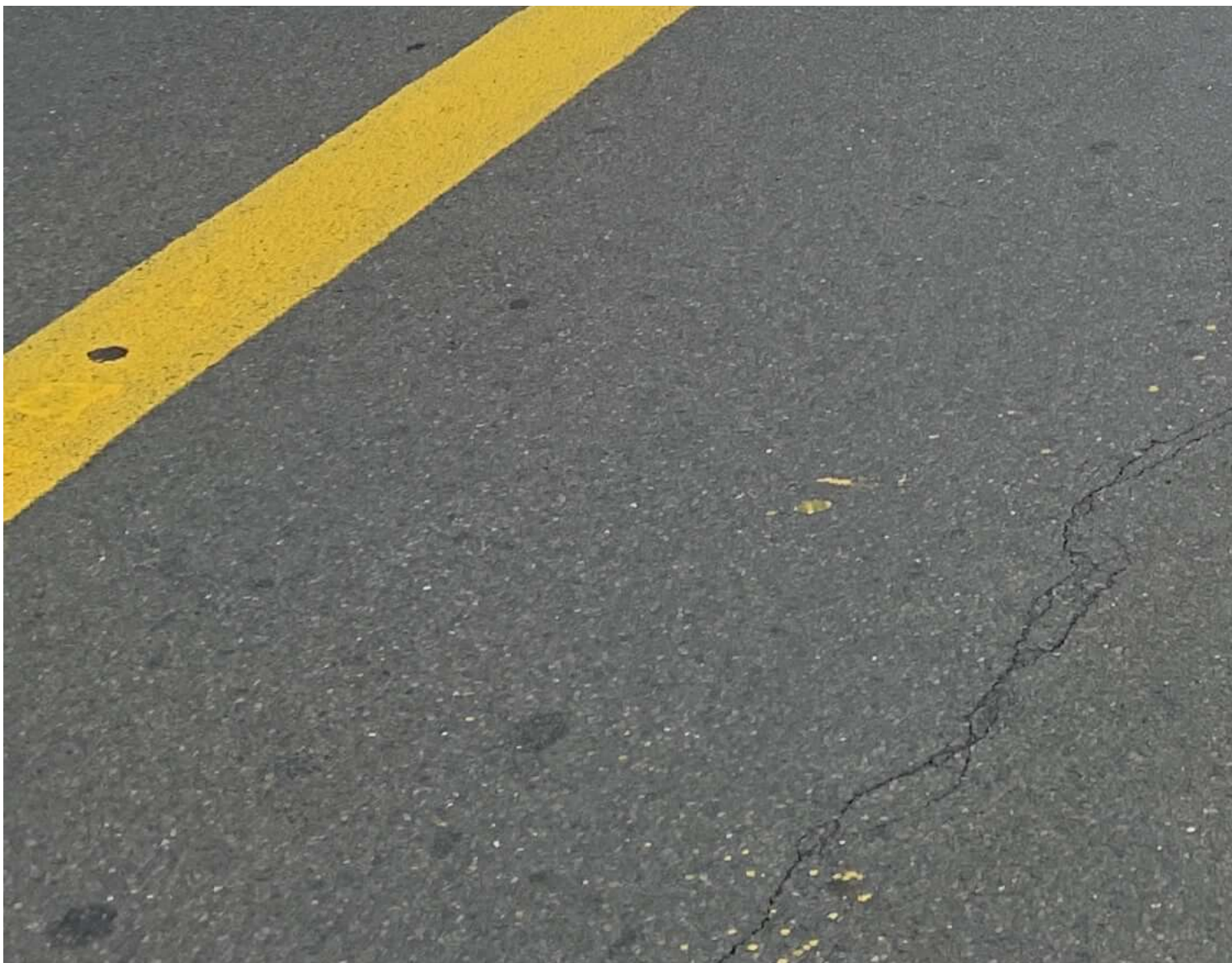
Photograph 16: Avenue Carrera Séptima, Bogota, April 2021, credit Maëlle Lucas (researcher)

Through tactical cycling urbanism, the health crisis has sped up the implementation of projects that were already planned. In Rennes, the development of the Quai Duguay Trouin into a cycle street was planned as part of the express cycle network. This project has been significantly accelerated thanks to the temporary cycling facilities that were set up during the health crisis and made permanent beyond it (Photograph 17).









Photograph 17: Cycle street (vélorue) on Quai Duguay Trouin, Rennes, October 2020, credit Nicolas Bourgeais (researcher)

In conclusion, the research carried out as part of the VÉLOTACTIQUE project has shown that coronalanes contributed to a kind of institutional and infrastructural recognition of cycling. The health crisis significantly and spontaneously increased the attractiveness of cycling, considered by its users to carry little or no risk of contamination - thanks to the physical distancing it allows, compared to being in a crowded public transport (Molloy et al., 2021; Tirachini and Cats, 2020). This situation prompted public authorities to deploy tactical cycling urbanism, in the form of temporary installations, which can be seen as accelerating trends towards making these cycling routes permanent - something which otherwise would have taken much longer to achieve.

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Notes

- 1 Programme ANR20-COV7-0007.

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.

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Lockdown

The lockdown measures implemented throughout 2020 in the context of the Covid-19 crisis, while varying from one country to the next, implied a major restriction on people's freedom of movement for a given period. Presented as a solution to the spread of the virus, the lockdown impacted local, interregional and international travel. By transforming the spatial and temporal dimensions of people's lifestyles, the lockdown accelerated a whole series of pre-existing trends, such as the rise of teleworking and teleshopping and the increase in walking and cycling, while also interrupting of long-distance mobility. The ambivalent experiences of the lockdown pave the way for a possible transformation of lifestyles in the future.

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