

Copenhagen Police on the new, diagonal cycle path: Remember our remarks if the press calls

Cycling 5 May at 05:05



Illustration: Christian Rantorp.

The famous Dybbølsbro intersection has once again received a new design, but the Copenhagen Police are still not convinced that it improves conditions for cyclists.



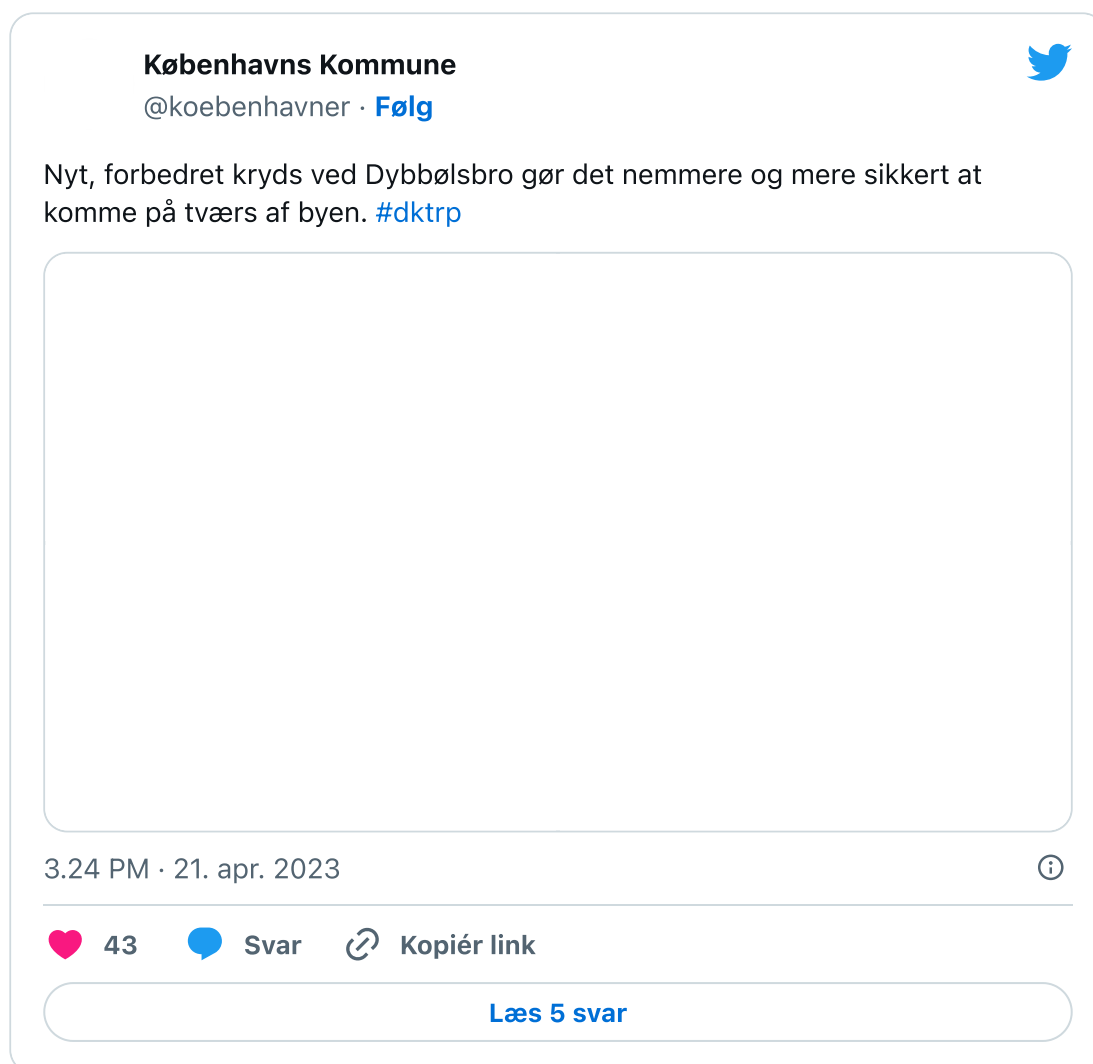
Christian Grunert Rantorp

Redaktør

A new, and [according to the Municipality of Copenhagen](#) , improved intersection at Dybbølsbro "should make it easier and safer to get across the city" on the route that stretches from all the way from Amager to Vesterbro.

The new, diagonal, cycle path, which opened a few days ago, as the first of its kind in Denmark, is the new and latest bid to be able to connect the two-way cycle path on the bridge over the track body, Dybbølsbro, with Skelbækgade and Dybbølsgade on Vesterbro .

Copenhagen Municipality has posted pictures [on Twitter](#) , where you can see the new path from above:



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Precisely the location of the bi-directional cycle path on the bridge has previously led to chaotic, and potentially life-threatening,

situations [after the rebuilt Dybbølsbro opened in 2019](#) , as cycling researcher and lecturer in computer science at the IT University Michael Szell has documented in an [article](#) .

When Dybbølsbro was rebuilt a few years ago, a steel deck was installed in the hole in the middle of the bridge. This construction meant that the bridge could only handle car traffic on the right-hand side, which is why a two-way cycle path had to be built on the left-hand side. But it also meant a deterioration of cyclists' accessibility at the intersection at Dybbølsbro, where, as can be seen here, cyclists no longer had to cycle the direct road, but had to go over to the other side to turn to higher ground (towards Fisketorvet, Amager, etc.) :



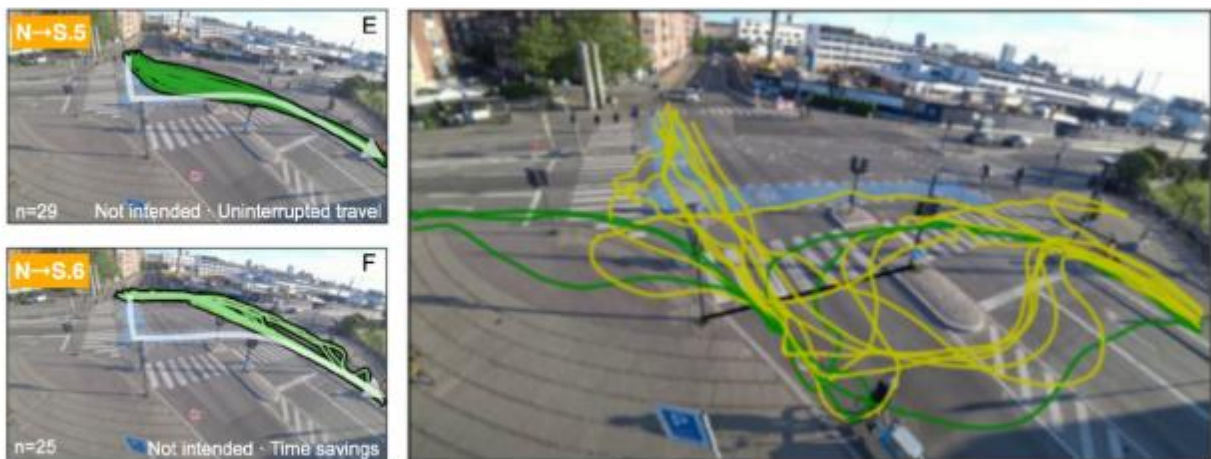
Illustration: Christian Rantorp.

Based on video data, the researchers from ITU have analyzed the movement of cyclists at the intersection. And it turned out that at least 11 percent of the cyclists did not follow the path that the design suggested.

"In just one hour, we identified in our study at least 495 unintended, and potentially life-threatening, manoeuvres," he and his colleagues write in the article and in a [Powerpoint presentation](#) from November, where they also comment on the new design that was announced last year.

Video data, collected by Cowi, reveals that the cyclists do not have the intended behavior when they had to travel in the old intersection. Many were inclined to drive where only cars were allowed to drive:

495 trajectories are not intended, potentially life-threatening



In just 1 hour!

Illustration: IT University in Copenhagen.

And the new design only solves some of the problems, it says.

According to the article, there were two particularly problematic trends in the old design. This was especially true for cyclists going from north to south at the intersection, i.e. from Skelbækgade and directly onto Dybbølsbro, and from Ingerslevgade towards Dybbølsbro.

Precisely because it is a two-way cycle path, which is located on the left side of Dybbølsbro, cyclists coming from Skelbækgade previously had to drive over the intersection to the right side of the

previously had to drive over the intersection to the right side of the bridge and then wait there before they could cross to the left side of the bridge and beyond Dybbølsbro.

As far as the crossing Skelbækgade to Dybbølsbro is concerned, only 466 out of 733 cyclists followed this "intended behaviour", which meant a mismatch between design and reality of at least 36 percent. The new design now seems to solve this by sending the cyclists more directly and diagonally across the intersection.

But especially for those who have to take the relatively short route from Ingerslevsgade towards Dybbølsbro, a good solution has still not been found, it says.



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Previously, the intersection meant that the cyclist had to go all the way around the intersection and along the way wait to move on twice before the cyclist could make the turn onto the bridge. According to the ITU survey, only very few cyclists did this, while 98 percent chose, for example, to pull or drive over the pedestrian crossing.

Video data shows that many choose to get off and pull over the pedestrian crossing, or cycle in the pedestrian crossing at Ingerslevsgade (with the pink marking) instead of driving all the way around the intersection and waiting for a green signal several times along the way:

Cyclists prefer uninterrupted travel, which the intersection fails to provide



Only 9 are "mostly intended"
Mismatch: 98%

Illustration: IT University in Copenhagen.

With the new diagonal cycle path, cyclists have to go to the other side of the intersection, where they can cycle back again via the new diagonal cycle path to get over the bridge.

"The problem was also there before, and the municipality is apparently fine with the cyclists just towing the bike. And yes, you can do that, but why is it that cyclists have to make these kinds of strange curves while motorized traffic has direct passage?' says Michael Szell.

The article continues after the ad



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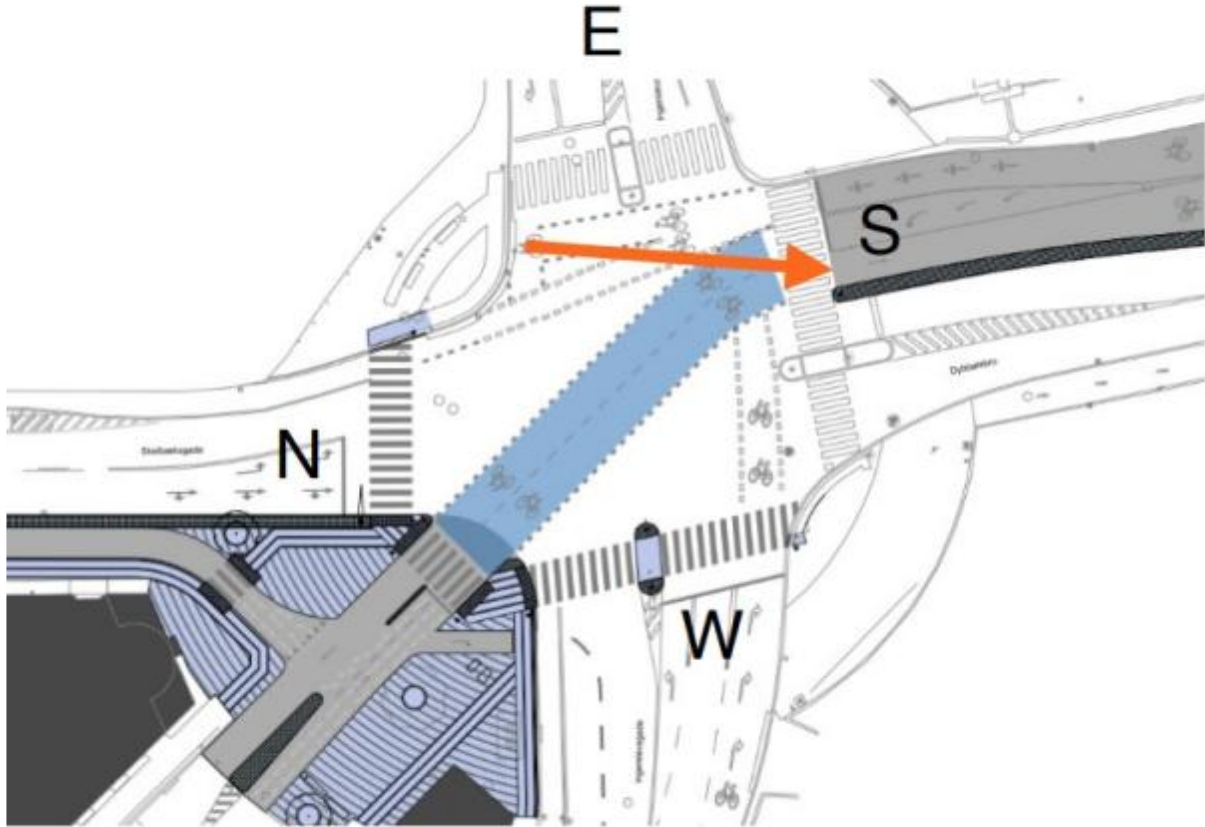
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Michael Szell from the IT University predicts that there will still be

Michael Szell from the ITU University predicts that there will still be problems with cyclists coming from Ingerslevsgade and wanting to cross the bridge:

Anticipated issues



- No solution for E→S

Illustration: IT University in Copenhagen.

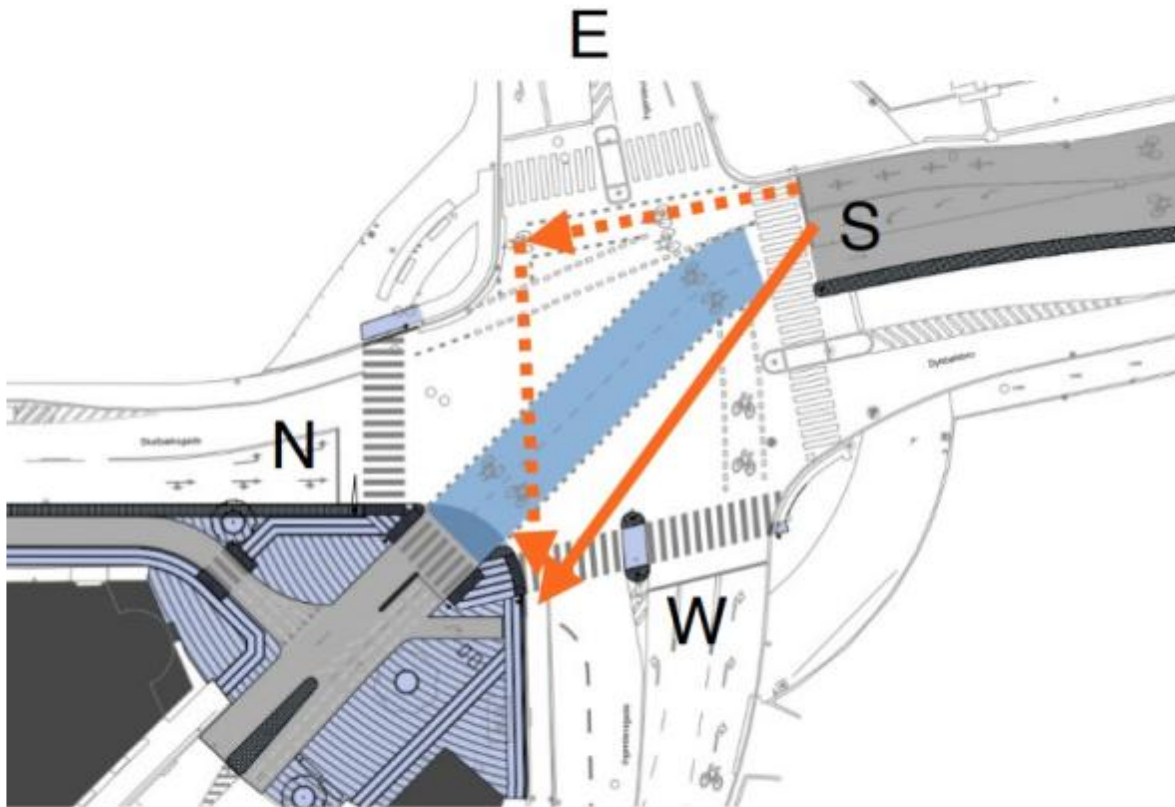
And then, according to Michael Szell and his colleagues, a new problem also arises with the new intersection for the cyclists who come from Dybbølsbro and want to turn left from Ingerslevsgade to the west.

In principle, the cyclists must drive over the intersection and wait before they can pass, but many will be encouraged to make an unintentional maneuver across the intersection.

Both the police and the ITU point to possible conflict situations between straight-ahead and left-turning cyclists on the two-way diagonal cycle

path:

Anticipated issues



- No solution for E→S
- New problem: S→W

Illustration: IT University in Copenhagen.

So, at first glance, it appears that the new redesign is a good step, but in general, the problems with the intersection will probably not be solved until two underlying problems have been solved, Michael Szell believes.



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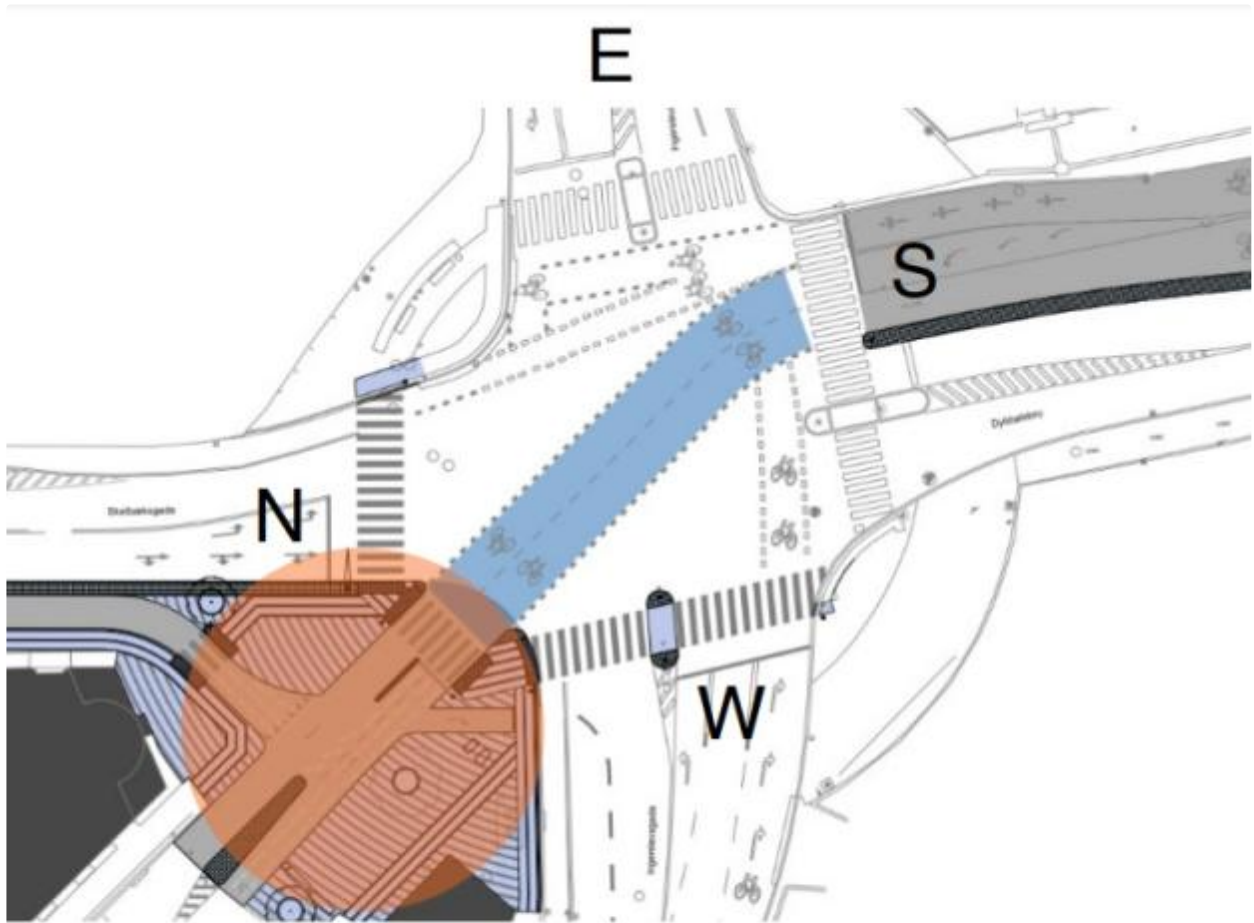
"The one underlying problem is that you keep switching from a

one-way to a two-way cycle path, which is a known design problem.

As long as you have designs, it will be very difficult to find a suitable solution with only minor updates. The other problem is that you have a huge and increasing flow of cyclists at the intersection, but most of the intersection is still designed for car traffic. You have to ask yourself why the municipality prioritizes the accessibility of cars to such a high degree when it poses such a massive danger to public health,' says Michael Szell.

Finally, Michael Szell points to Yrsa Plads, where a lot of new asphalt has been laid. This solution is also a bit special, for example for cyclists who come via Skelbækgade and want to turn right via Ingerslevsgade, or who want to continue over Dybbølsbro, now have to enter the square's new bicycle "shunts". And it will probably take some getting used to for many.

A lot of new cycle infrastructure, (so-called shunts), has been built at Yrsa Plads, as can be seen in the picture here, but this only adds to the complexity of the intersection, Michael Szell believes:



- No solution for E→S
- New problem: S→W
- Increasing complexity (Yrsa plads)

Illustration: IT University in Copenhagen.

"Here, I think people have made it more confusing. When designing for people, one should strive to reduce complexity, and not, as here, add more to it'.



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The Copenhagen Police is somewhat of the same in its consultation

The Copenhagen Police is somewhat of the same in its consultation response to the project. Here, there is also concern about left-turning cyclists who do not complete their turn by driving towards the corner of the intersection and then complete their turn.

And then the police also point to challenges with conflict situations between straight-ahead and left-turning cyclists on the two-way diagonal cycle path.

Likewise, the police foresee problems with compliance with the right of way for cyclists along Skelbækgade towards Dybbølsbro, and future traffic challenges when the Kaktustårnene are completed.

"It can be seen in the municipality's response that the police's concerns are acknowledged, but that the municipality considers that the traffic challenges are not so serious that the project should not be carried out. However, the Copenhagen Police must repeat that we are concerned that the new solution will not make the traffic conditions for cyclists at the intersection any better than they currently are," the police write.

Copenhagen Police acknowledges the municipality's wish to implement the project and gives consent to it, but then writes at the same time:

"At the same time, we must state the wish that the municipality remembers our remarks in the event of any future critical inquiries from the press or the public".

The Cyklistforbundet in Copenhagen is otherwise positive, where chairman Erik Hjulmand assesses that the new solution works well. However, he also insists that the new solution does not solve all problems.

"It is a solution that prioritizes the majority of cyclists at the intersection. If you are coming from the DGI junction via

Ingerslevsgade, and have to turn left via Dybbølsbro, it is a very special maneuver that you must now carry out. And that will probably make many people consider a short, illegal manoeuvre,' says Erik Hjulmand, who will, however, praise the municipality for daring to try new solutions.

In the study from the ITU, reference is made [to a report](#) on best practice in the area by urban planner Mikael Colville-Andersen, which states that work should be done to reduce the complexity of the intersection and respect that cyclists find it easy to navigate and reach the intersection .

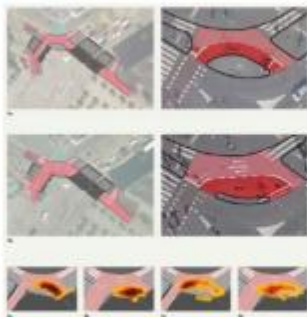
Michael Szell believes that the intersection could be improved to the benefit of cyclists by, for example, drastically reducing the speed limit or by removing the light regulation at the intersection, [as there are examples from Amsterdam](#) , and including a larger area of the intersection for dedicated, protected cycling infrastructure, as is known that of [the Dutch cross](#) . And then he mentions the reintroduction of a roundabout at the intersection as a cycle-friendly option.

If you want to ensure good accessibility and less chaos for cyclists, there are better solutions from abroad to be inspired by, Michael Szell believes:

The underlying issue is car-centric design

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Hahn & te Broemelstroet, Transp Res Int P 9, 100289 (2021)
Gemeente Amsterdam (2018)
Hartmann & Abel, ITE J 90(5), 32-38 (2020)
Klanjic, Gavin, Tizzoni, Szell, EPJ Data Sci 11, 27 (2022)

Illustration: IT University in Copenhagen.

"You maintain with the new solution that the majority of the infrastructure is allocated to car traffic, also known as "the arrogance of space". Furthermore, car traffic has easy and direct passage at the intersection, for example when turning left, while cyclists and pedestrians must stop and wait "You would like to find a design where this kind of thing is not a problem, and it could be a roundabout, for example," he says.

Also the aforementioned Mikael Colville-Andesen has previously proposed that a roundabout be reintroduced at the intersection, where it was closed 20 years ago. At that time, the roundabout was closed down and converted into a roundabout precisely with reference to the fact that there were (too) many cyclists.

"It is a problem for the roundabout that a relatively large number of cyclists and pedestrians have to go through, as motorists have to hold back for them every time," [it read at the time](#) .

Mikael Colville-Andersen tells MobilityTech today that a roundabout will still be the best solution for the majority of road users, which in this case are cyclists. Cars are in the minority, [the municipality's own figures show](#) .

He admits that the diagonal cycle path is a clear improvement compared to before, but also insists that there are already indications that some cyclists have to make their own "hacks" in order to pass the intersection.

"Roundabouts are intuitive and have long since proved their worth in the Netherlands and elsewhere. Now, instead, tax dollars are being used to test yet another small-desperate solution, because they maintain a car-centric focus. It is a sad development.'

The municipality [wrote in connection with the announcement of the new intersection last year](#) that the administration "had investigated several different models, including a roundabout", but this solution would not be possible, "as, during rush hour, it will be disproportionately difficult for the buses and the cars to get through".

This article

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