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## A Northern European perspective on creating more activity friendly cities



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## ARTICLE INFO

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The 2016 edition of the Active Living Research (ALR) Conference held in Florida included an international symposium with many high quality presentations from research and implementation projects from, primarily, the Americas, as well as a number of cities in Australia and Asia. A selected number of these presentations have been further developed into full papers and are included in this special issue from Preventive Medicine. The papers show the wide variety in projects that are studying how the built environment can stimulate more active living by means of walking and cycling. The progress that is being made to improve conditions for walking and cycling is truly impressive. However, one of the comments that I heard both at this conference as well as in many other discussions with non-European researchers, planners and policy makers was that 'we can never expect to achieve the same active transportation rates as countries like Denmark and the Netherlands because we lack their cycling culture and our cities have hills and/or bad weather'.

I grew up with and am still enjoying a culture where public transport and walking are common and where cycling is the norm for 1-5 km trips. I was born in the city of Groningen, The Netherlands, a city with about 200,000 inhabtants, where today 61% of all trips are made by bicycle, rising to >70% for trips made to educational institutions. For the past 15 years I have lived in Copenhagen, Denmark, a city that is branding itself as a cycling city and where 45% of all trips to work or educational institutions are made by bicycle.

So yes, I am used to a cycling culture. However, contrary to popular believe, this cycling culture in larger cities in the Netherlands and Denmark is not something that has always been there. Just as in most of the developed world, Dutch and Danish cities worked hard in the 1960 and 1970s to create car-friendly cities with wide multi-lane streets and ample car parking. And just like most European city planners and politicians they supported a modernist vision on city planning with wide streets in a grid pattern, large apartment buildings and green space in between buildings. Examples of dense pre-WW2 neighborhoods being torn down and replaced by modernistic neighborhoods exist all over Europe. New neighborhoods in the same modernistic style have been built in many European cities as recent as a decade ago, although to be fair, the plans for these neighborhoods were often drawn up in the 1980s or 1990s.

In other words, the famous Danish and Dutch cycling culture is a relatively new phenomenon which a city like Groningen, has taken 40 years of hard work to create. In Groningen the big change came overnight, literally, in 1977, with the implementation of the 'Van den Berg's traffic circulation plan'. The essence of the plan conceived by a 24 year old city politician, Max van den Berg, was that the center of Groningen would be divided in four sections that were unconnected for motorists. Cars had to take the ring-road around the inner city, whereas cyclists could move freely about on new cycle paths constructed to accommodate them. The traffic circulation plan was implemented over a single night and the center of Groningen became impenetrable for cars. Hundreds of new signs were put up to create one-way streets or change their direction and the next morning, hostesses greeted confused motorists with flowers and leaflets that explained the new situation.

This bold and unprecedented move created the basis for today's 61% bike share. It was definitely not popular with shopkeepers and local businesses when introduced, and the local 'anti-car' politicians needed police protection for years to come due to the threats they received. Yet today, almost everyone in Groningen agrees that the 'pro-bicycle plan' was a good idea and that it has created a lively, vibrant, compact city where the teaching hospital and the university are in the heart of the city, as are shops, bars and restaurants, and everything can be easily reached by bicycle. However, also Groningen has it bicycling challenges, albeit of a different type than most cities around the world. The issues cities like Groningen, and other cities with a high bike share, have to solve are related to congestion on busy cycling paths (no this is not a joke, it is very real with > 10,000 cyclists passing busy intersections during a typical morning rush-hour), cycle parking problems and reduced walkability due to bicycles being parked on sidewalks.

I think that other cities around the world can learn from the Dutch and Danish experiences to create cities were walking and cycling are the norm for shorter trips. Based on the research my colleagues and I have done active transport in Denmark and the Netherlands, and reflecting on the great work presented in this special issue the main lessons are:

- Don't expect miracles in the short-term, creating a walking and cycling culture and the built environment to go with that takes a long time, but it can be done
- A long-term vision requires strong political leadership with leaders that dare to make choices that might be impopular in the short term

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such as reducing parking or pedestrianizing streets

- Think macro before micro or in other words, adding walking or cycling facilities (micro) does not really make a difference if there are no destinations (macro) to walk or bike to
- The low hanging fruit lies in finding places where there are many destinations already in place (the right macro conditions) so that creating micro level improvements to walking and cycling facilities has the potential to quickly increase the number of pedestrians and cyclists
- In neighborhoods with local destinations, discouraging driving, and especially reducing parking, seems effective when wanting to increase active transportation
- Utilitarian cyclists seem to follow a similar rationale as drivers when it comes to picking routes, they want to get to their destination as quickly as possible and prefer a more direct route with fewer stops. In other words, providing cycling routes away from the main roads and main destinations will have less effect than providing cycling facilities on the main routes to destinations
- *E*-bikes are a good solution for more hilly cities and they can also help make cycling realistic for elderly or for families with small children that can use an e-cargo-bike

- Cargo-bikes or e-cargo-bikes are also a good solution for inner city transport of smaller goods
- Bad-weather cannot be changed, but in cities where it snows e.g., Copenhagen, the city can have a policy of clearing the bike-lanes first before the car lanes
- Big-box stores or large indoor shopping malls can often only be reached by car and discouraging these type of places in planning regulations for example by stipulating a maximum size for a single store or the maximum number of stores under one roof is a successful strategy in The Netherlands and Denmark to promote smaller scale shops
- To stimulate active transport on longer journeys, good facilities that promote bike-train-bike journeys seem to work well. In Denmark, opportunities to bring bicycles on the train have been dramatically improved the past years, with great success, and in The Netherlands an elaborate scheme of public transportation bicycles available at most train stations is really successful