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# The Benefits of Cycling - Global and individual well being

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since 1817, human beings have had a means of freedom through individual mobility, consisting of what initially began as a wooden frame with two in-line wheels. However, amidst the drive for capital and economic prosperity, this symbol of independence and joy has been transformed into one of last resort, unfortunately frequently associated with poverty. Within the last 50 years or so however, some leading global cities have come to realise the value of cycling, not only for the sake of mobility, but as a way of life. Some would argue that with the current economic crisis, there is no room for bike-oriented societies. On the contrary however, it could be argued that with the storm we are now facing, the plummeting economy, ever-growing health crises, together with global warming present not only a unique challenge, but a fascinating opportunity to transform our cities into great places for people to live in a sustainable way.

Yes, we are at a critical juncture demanding urgent action. Hundreds of cities worldwide are thinking and talking about ways in which we can create world-class, people-oriented cities by focusing on the development of adequate infrastructure to foster environments that encourage the use of bicycles. There may be a lot of talking and thinking but there is not enough doing. Almost all of the major cities in the world are being faced with rapid growth and higher urban density as larger proportions of the population leave rural areas. The US population will increase by 100 million in the next 25 years for example and the world population by 2.5 billion by 2040. During these radical changes, cities should keep one thing in mind: their citizens' wellbeing. We must grasp the opportunity to transform our cities into places where priority is given to the individual person over the car; where everybody can mobilise in an easy, efficient, and human way: by walking, by using public transport and also by using their bikes.



"Bike-pooling" kids to school in Utrecht, Holland

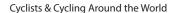


Ciclovia in Bogota, Colombia. Over 1 million people bike, walk, skate, "watch people" every Sunday of the year

# We must overcome barriers, real and imaginary

Many of the "thinkers and talkers" claim that there are far too many insuperable barriers. "Our city is no Copenhagen or Paris, we don't have a bike culture", they say. Climates may be different, cultures may not be equal, but people are the same; we are all social animals. As for comparisons, we are not creating sim-cities on our computers - we cannot "copy and paste" but we can and should "adapt and improve". Every city is different, with unique challenges and prospects, but *all* have the potential to be wonderful places to live in.

Before the transformation of Copenhagen, there was a lot of resistance in the city to creating cycle tracks and pedestrian streets for social mobility. In fact, the Danes used to say, socializing through means of mobility was for the Italians, as they seemed to like public spaces and spending time on streets, sidewalks and piazzas. In fact however, once the streets were transformed into pedestrian promenades, the Danes became "more Italian than the Italians" and enjoyed them seven days a week, all year long.





Riding bicycles in Copenhagen, Denmark. "There is no such thing as bad weather, it's bad clothing".



Consistency in Copenhagen, Denmark: always on the right side, always unidirectional and always physically separated from cars when car's maximum speed is above 30 kph (20mph).

Cycling and walking is great for local stores as people purchase goods for two or three days whereas people going to shop by car buy for two or three weeks and end up shopping at big out-of-town supermarkets.

So, despite the many challenges and doubts, Copenhagen is now one of the world's leading cities for cycles, where more than 36 out of every 100 trips are done by bike. In order to create cities that foster an environment where people feel safe enough to use their bicycle for daily trips, we need public engagement to demonstrate to the decision-makers how citizens want to live, what makes their people happy.

It is not surprising that the major predictors of a city's success nowadays include happiness and quality of life. Every city's main goal must be how to retain its best people as well as how to attract great people from other places. This is done through creating great quality of life.



Bike racks on buses are "visible" but do not get "non street riders" to begin riding. Vancouver, Canada

So, in order to overcome these barriers, we need to prioritise the general interest over the particular. Change is hard and if we want it to be accepted unanimously we need to dilute it so much that it would no longer be change. We must keep asking ourselves "how do we want to live" and then make the necessary decisions to move in that direction.

It is clear that the barriers are neither technical nor financial, they are political.

# **Key actions**

There are many cities who claim that they want to be "cycle friendly". Unfortunately, most of these focus on doing things right but not on doing the right things.

There are a number of actions that actually improve conditions for existing cyclists without getting many additional cyclists on the streets even if they are "done right"; for example, signage, sharrows, education, bike parking and lockers, racks on the buses, painting lines on the pavement, etc.



Protected bike-ways in New York, USA. A painted line on the pavement is not safe enough; it needs a physical separation like the one shown in the photo.

There are however, two key actions which will increase the number of cyclists: lowering the speed below 30 kph (20 mph) on all residential streets and secondly, building a network of protected bikeways on all arterial roads which have more than 5,000 cars per day or speeds higher than 30 kph. With regard to the first action, it has been demonstrated that lowering the speed to below 30 kph (20 mph) saves lives and is not only good for cyclists but also creates great communities, walkable, safe for all. If a person is hit by a car going at 30 kph there is 5% probability of getting killed, while if the car is going at 50 kph the probability of getting killed increases to 85%. With regard to the bikeways, they must have a physical separation between the cyclists and pedestrians and especially between cyclists and motor vehicles. The message is clear; politicians need to create networks of protected bike lanes. This is not done by painting a line on the pavement; actually if they approve the difficult part by providing the space on the street for cyclists, then they should go one step further and build "enhanced bike lanes" adding the physical separator which is a must in order to attract new riders and to make it safe for all. The line by itself might make it more comfortable for existing cyclists but will not attract those who do not bike for fear of getting run over by cars. The goal is to make riding a bicycle safe for all: including children and older adults and novice riders. When bike lanes (lines) do not work, it provides politicians unfriendly to bicycling "an excuse to show that cycling is not part of their culture" and bike lanes are removed.



Vancouver, Canada has begun building great bikeways, physically separated from cars and pedestrians, safe for all.

# The benefits of cycling

Far too often, people speak about cycling as a means, focusing strictly on the precise action, as opposed to the benefits, the ends. Once we discover the benefits that cycling provides, we can begin looking at overall lifestyle in a far more desirable manner. After all, there are many reasons why, despite their high economic development, the Danes *choose* the bicycle as their *preferred* means of mobility, but let's summarise under the acronym E.A.R.T.H.

#### **Environment.**

Although inherently associated, the relationship between cycling and the environment deserves further attention and support. The use of a bicycle as opposed to a car, greatly reduces pollution, gas emissions, noise and traffic congestion.

## **Economic Activity**

Having citizens ride bicycles benefits the economy in many ways. For example, the cyclists can carry groceries for only two or three days while the car drivers carry for three

or four weeks; the cyclist buys local while the car driver buys at big supermarket. A second benefit is the disposable income. According to the American Automobile Association the annual cost of an economy car is \$7,500; if a household can downsize from two to one cars, all of the sudden there will be substantial savings to spend on other goods or services, thus improving local economy.

#### Recreation

Cycling provides recreational opportunities for everybody, regardless of economic, social or ethnic background. This recreation is in addition to utilitarian cycling, it's just fun. Obviously the division of cycling for recreation and for transportation is not always clear; we might use the same bikeways in the morning to ride to work while in the evening to go to the movies or to visit friends.

## **Transportation**

Cycling plays a double role in transportation: as a way to move from points of origin to our destinations as well as a means to connect with other modes, such as public transit. Unfortunately no large or medium size city has solved the issue of mobility through the

Seville, Spain built a grid of over 150 kilometers interconnected and cycling increased from less than 1% to almost 7% share in four years. Great for cyclists and for business along the grid.

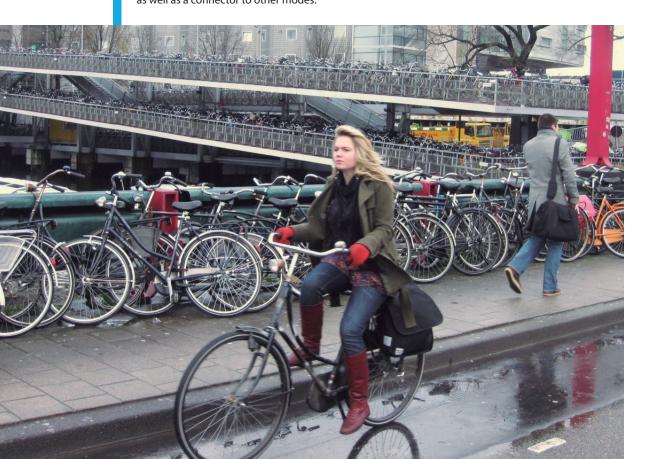


private car. The only solution is to have public transportation. Most cities are investing large sums in public transit but busses or trains will not pick us up in front of our homes or drop us off at our destination. Here is where cycling can play a key role - as a connector to and from public transit - as long as we build the proper infrastructure of safe bikeways connected into a coherent grid as well as networks of bike parking.

#### Health

There is growing, global concern about public health and there is a very clear correlation between physical and mental health benefits and cycling. The obesity rates have increased geometrically over the past two decades to a point where in countries like Mexico or the USA one in three citizens is obese. The lack of physical activity along with the obesity is producing many health problems and illnesses. The key to meeting the 30 minutes a day of physical activity recommended by the World Health Organization is to make walking and cycling a normal part of everyday life. The situation is clear: countries where cycling is part of everyday life have very low levels of obesity. With heart disease being the number one cause of preventable deaths, the cycle lifestyle represents the pivotal lever between life and death. Furthermore, clear links have been cited between daily exercise and decreased levels of depression, anxiety, attention deficit disorder etc.

Thousands of bicycles parked at the main transit station in Amsterdam, Holland. Riding bicycles improve mobility by itself as well as a connector to other modes.





In New York, USA, they created a very successful Ciclovia / Open Street program called Summer Streets. It showed citizens and city staff that streets can have different uses according to the time of the day, the day of the week or season in the year.

# How to move from talking to doing

Once we realise the many benefits of cycling, we must create broad alliances to represent all those interests. This process is like a three legged stool where one leg is the elected officials from the municipal, state / provincial and national levels. The second leg is the public sector staff, including the obvious like transportation and planning as well as others directly related to benefits like public health, environment, economic development, parks and recreation.

This change process must take into consideration:

**Political will**: politicians must understand that the general interest must prevail over the particular in such actions as eliminating car parking to allow a bikeway to be safe.

**Doers in the public sector**: people working for the government must keep in mind that every week the citizens are paying them to get things done and not to have 20 reasons why they cannot be done. They must always look for solutions to the problems and not problems to the solutions.



Montreal Canada has changed many painted lines for physically separated bike ways and the rides have moved from mostly young men, to mix of gender, age, level of ability, as well as social, economic or ethnic background.

**Leadership**: hundreds of leaders are needed, in places of work, universities, schools. Some will have city-wide impact while others will just work locally.

**Citizen engagement**: citizens can no longer spectate, they must participate. If citizens are not attending public meetings, calling radio stations or writing letters to city officials, someone else will be doing so and thus setting the agenda.

**Sense of urgency**: given the storm we are facing mentioned at the beginning, including global warming, obesity crisis, traffic congestion, economic crisis, population growth, it is evident that we must act now.

There are major challenges but also fantastic opportunities. We must constantly ask ourselves "how do we want to live" and act accordingly. We - politicians, city staff and citizens - must be consistent, between what we think, say and do.

We need to improve the cities that we have today, but we also need to build great cities for 2 billion people in the next 30 years. The use of the bicycle can and should play a role in this process. In order to promote its use we should focus on the benefits instead of just talking about it. We should act to gather the necessary support to build complete networks of safe infrastructure for all cyclists regardless of age, gender, or economic, social or ethnic backgrounds.



Bogota, Colombia where Mayor Enrique Penalosa built great bike-ways and side-walks "in part to improve safety but equally important to dignify the pedestrians and cyclists"; they should not be treated as second class citizens when they provide so many benefits to the community: health, environment, economic, mobility and more.

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## **Photo credit:**

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