



The effect of pedestrianisation and bicycles on local business

Case studies for the
Tallinn High Street Project

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Introduction

In recent years we have been witness to exponential growth in demand for public spaces designed for pedestrians and bicyclists. For citizens, in other words. Words like pedestrianisation, sustainability and its variations such as sustainable mobility, even sustainable walking and cycling, are now commonplace. Long-term macroeconomic advantages and health benefit are also becoming more widely accepted, as studies compile comparing car related expenses to households, society and public health and less traffic accidents.

This change in the way the wider public regards our urban living environment - both by those who experience spaces and those with the means to shape and build it – is nonetheless anything new or revolutionary. It is rediscovering the human scale, to use Jan Gehl's phrase. Nonetheless reclaiming these natural features of a city constantly run to obstacles. Business and real estate owners, for instance, have every right to worry about their revenues and customer base. However it is important and within this case study's scope to show that they also have good reason not to be concerned, as better – accessible, pleasant, lively, attractive, customer friendly – public spaces will draw more people and customers, increase revenues, amount of businesses and raise the real estate price.

The aim of this study is to answer why a city should engage in making public spaces less accessible to cars and more open to pedestrians and bicycles and how it affects locals businesses in the pedestrianised area. There is an introduction and with a theoretical part and a case study, preceded by examples from the wider world to exemplify prevailing trends.

Below is a preliminary overview of current directions, prevailing paradigms and best practices of urban planning that would facilitate a better dialogue with stakeholders in the Tallinn high street project. The focus has been on best practises on creating good public spaces, by means of bicycles lanes and pedestrianisation, how it affects the local economy and contributes to city attraction factors.

This will be tied to place branding and place making, i.e. what counts in place branding in a city context and how better conditions for pedestrians and bicycles improve the attractiveness of a place and thus the national economy and local businesses. This study - which is preliminary and by no means exhaustive pertaining to the topics or locations covered - will provide examples and ideas on why more pedestrian walkways and bicycles should have priority over cars.

Executive summary

The bicycle is a tool. It is a tool to improve a city brand, i.e. its attractiveness to residents, tourists, (international) students, talents and investments. Making a city more pedestrian and bicycle friendly necessitates many things that will improve urban life, both according to soft and hard factors. It raises local businesses' revenues. It is an elementary and integral part of a modern society. One does not have to be a bicycle fan in order to appreciate and understand the potential a city's openness to bicycles and pedestrianisation can bring.

Making a city, district, street or area more open to transport methods other than private cars means that these alternatives must also be provided. The quality of the service provided and public awareness created can and will create attraction, if executed correctly and involving stakeholders from the start, i.e. anticipating their needs and desires. This study will show that:

- Improving the conditions and inviting more people to use bicycles (or walk or use public transport) requires:
 - Above all, safety
 - For example, separated bicycle lanes, giving priority signalling at crossings, using “cycle boxes”, street lighting, elevated crossings etc.
 - Infrastructure and means (enough public bicycles, trains, buses etc)
 - Active and constant promotion and awareness creation
- Cyclists and pedestrians give a considerable contribution to business revenues
- The attraction of the place, street and city, increases with pedestrianisation
- Pedestrianised spaces and increasing their share of the public space has become elementary feature of a contemporary city
- Having proper bicycle infrastructure is a hygiene factor
- Pedestrianisation matters and world cities engage in it
- Furthermore, world cities invest in researching what are the trends, expectations and possible future behaviours in urban life, in order to anticipate it and be ahead of the curve
- Better conditions for cyclists and pedestrians increase a city's brand value, attracting:
 - Tourists, (international) students and talents
 - Investments
- Public spaces that are accessible and not occupied by/designed for cars are natural to a city, the way it is perceived internally and externally
- Improving public spaces will improve a city's uniqueness, more than cars and parking lots will
- Involve stakeholders, both citizens and businesses in campaigns in order to achieve best results
- Claiming a bicycle friendly city reputation can make a city (with previously low brand image) more attractive to people and businesses, even internationally so

In other words, if there are only a few bicycles on a city's streets, chances are that what can be seen instead is a serious amount of unused potential.

What benefits for the city?

Let us begin by exploring what is place branding and why it matters. To be sure definitions are aplenty. Those who have a background in economics and the private sector can see it in marketing terms: it is a selling tool. Those with public sector and diplomacy background can see it as reputation management and gaining reputational benefits. To be short, the overall aim is to increase the value of a place by attracting more money (tourists, resident demand, offices, shops etc) to a region.

The tools for achieving a better reputation, or brand, are policy tools: creating change. Only after engaging stakeholders and starting actual change, i.e. place making (e.g. building separate bicycle lanes) can communication and marketing come into play in order to tell the world about this place. Otherwise there is no need. Communication is a part of place branding. They are not the same. That is why spending funds on visuals of the beauty of a given place is nice at best, but has little instrumental value. The world is full of beautiful cities and nature, whatever the definition of that beauty may be. What matters foremost is what the target audience wants, what speaks to them. In order to gain interest and trust one needs to offer something that is interesting and trustworthy, something that enables the place to join a global conversation.

Place branding is thus substance and strategy. It is founded on the uniqueness and character of a place, definable only by the stakeholders. Countries have a *de facto* brand, collections of their values and offerings.ⁱ If they have an image, it can be managed to an extent. People are interested in a place if that place speaks to them: what it offers in terms of not only goods and shops, but also the quality of life. Aside from a sunny climate these would include the character and supply of jobs, infrastructure, schools, kindergartens, parks, museums, public transport etc. This is what the city can directly provide or create a suitable environment for.

How resilient a city is should be acknowledged as well. In short it means whether and how the city manages to respond to its mission of providing services and how it treats its citizens: does it address people's concerns regarding public roads, sanitation, accessibility, transport, does it clean snow during winter? Does it complain how much it has to do and that people are not praising it enough?ⁱⁱ It is quite a recent buzzword, with UN programmes, books, organisations like the Rockefeller Foundation and the World Bank joining the discussion. Arguably it is similar to "sustainability" or "liveability", but as its proponents hope it is more measurable and universally applicable across continents and cultures.ⁱⁱⁱ

Positioning

A more indirect, if you will, influence is responding to other very important needs that people have and that matter a lot when choosing where to live. Richard Florida, a best-selling urban regeneration theorist and author of the notion and book "Creative Class", a superstar in the field of talent attraction and place branding, recently reviewed a study from England. Unsurprisingly the main factors when choosing where to live are housing costs, family/friends and workplace proximity and public transport facilities.^{iv} At surface this should not be too shocking a realisation that people would like to have a job they desire and live close by.

But it is the larger picture and how a city acts that matters. Are cities or districts positioning themselves to their target audiences? Who are they and have their needs been defined? How and why should any type of jobs and talents emerge at a given place when the dissonance between the location and target group's desires is too wide to gap?

City brands matter. As Simon Anholt, a revered authority in the field, has pointed out this brand (or competitive identity) is an external matter: the image a country (place) may hold of another country (place) is a matter of their culture and attitudes. Whatever the differences in opinions, these images and perception matter if a country or city wants to be *relevant* and open so that investments and tourism would occur.

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According to Bill Baker, one of the leading experts on small city branding there is a clear connection between a city's brand/reputation and its ability to attract talents, tourism and investments. In order to succeed in a competing global market, proactive action and strategic thinking is needed.^v

As professor Charles Landry, a sought after urban planner and author, recently put it: "15 years ago, 80% of people chose jobs over location. Landing a job was the number one priority regardless of location. Today, the situation has changed. Now, 64% of people will try to land a job in the city of their choice."^{vi}

Second tier cities and co-operation

A study conducted in co-operation between universities in the UK, France, Finland and Hungary in 2012 defines second tier cities as "cities outside the capital whose economic and social performance is sufficiently important to affect the potential performance of the national economy."^{vii} Naturally, they vary in size, economic structure, relation to capital and one another. The study accounts for 124 secondary cities in Europe, which constitute 80% of the urban population. Malmö is a second tier city compared to Stockholm, Tartu compared to Tallinn, Tampere to Helsinki. To be clear, the term secondary city is subject to many studies and a wider debate but we will not dwell on this topic too long.

Our case study subject Malmö could also be regarded as a secondary city to Gothenburg and even Copenhagen. The geographical and perceived vicinity of these cities creates a different dynamic and more competitive environment for Malmö to operate in.

These same can apply to Tallinn. In Estonia it is without a doubt indispensable. However it could be regarded as a second tier city in Northern-Europe and compared to Helsinki when looking at attraction factors, GDP and the city brand as a whole.

The *Talsinki* idea is hardly news. However, the concept mentioned above brings us to opportunities and regional co-operation. As the case study high-lights Malmö has managed to not only up its brand equity and evolving into a service oriented and an exemplary urban living environment, it has co-operated with Copenhagen, among other things, on building the Öresund bridge that now famously links the two cities. Seamless transportation projects are envisaged for the future that would bring these locations even closer.

They are not an exception, as co-operation between cities to attract investments extends beyond geographical proximity. A Nordic Place Academy case study (Future Place Leadership/Place Consulting, Mats Segerström, 2015)^{viii} highlights the examples of Lyon, Gothenburg and Birmingham that have established themselves as Challenger Cities, a concept according to which they are twin (or triplet) cities, that have similar socio-economic structures but also challenges when it come to their respective capitals that outrun them with higher visibility and marketing budgets. The Challenger Cities decided to create synergies by teaming up for attracting more investments at large trade and investment fairs in Europe.

Another example is the Arctic business alliance between small university town of Oulu, Tromsø and Luleå in Finland, Norway and Sweden, respectively. The underlying principle is the same: tough there are differences between the cities, there is plenty that they share. While being competitors, they decided it is best to work together for investment promotion. In 2013 they participated jointly at MIPIM, one of the most important real estate shows.^{ix}

Will local businesses benefit?

Local businesses will benefit from more bicycles on the streets. More bicycles will come about if there is enough attraction, i.e. soft and hard factors for people to get on their bikes and ride. To be short, bicycling needs promotion and proper infrastructure is a must as that relates to safety. And safety always comes first. An easy way to give a first personal evaluation to a place for its bicycle friendliness is asking oneself a simple question - would you let your children cycle there?

When it comes to larger revenue streams for retailers and businesses at a pedestrianised location, then one need not look further than Denmark. Obviously, Copenhagen is at the forefront of creating good public spaces. 63% of the people cycle daily to work/school.^x During winter bicycle lanes are cleaned of snow as a priority. But there is more to the country than just the capital. “Think Denmark!” as the country brand says. The Danish Road Directorate commissioned a study in different regions in the country - Aarhus, Odense, Aalborg, Kolding, Randers, Horsens and Ikast-Brandeborg. Focus: city centres and shopping areas, questioning about 1 500 people. In November 2015 the results were in, reverberating Copenhagen’s own experiences. Namely pedestrians and those on bicycles yield ca 50% of retailer revenues in larger city centres and 25% in smaller ones. Cyclists visit shops more often than those travelling by car. In centre areas the bicycle is the preferred means of transportation.^{xi}

Ari-Veikko Anttiroiko, Adjunct professor at the University of Tampere presents his City Attraction Hypothesis in the book “The Political Economy of City Branding”. He writes about of globalisation and value flows, noting, “in a globalized world the attractiveness of a city is the key to its success.”^{xii} (Anttiroiko 2014). He warns of falling in to the misleading trap that this somehow would render a city’s residents secondary, as now a city should only think about pleasing others (tourists, a predefined international target group etc). To be short and concise – there is no such conflict between local and global in this context. To continue with Anttiroiko’s conceptualisation, it is best in this regard to think about living in the global world. No country or city is an island (except perhaps a precious few). Let us continue: “Urban managers must ensure that their city is attractive to the economic interests that are at the centre of global economic changes.”^{xiii}

Chief planner of Toronto Jennifer Keesmaat: “Investment in public spaces/infrastructure generates returns: higher property values + tax revenues, reduced vacancies, employee retention.”^{xiv} Toronto is the best city to live in according to the Economist Intelligence Unit (2015).^{xv} A series of studies before and after pedestrianisation of streets in different areas in the US have shown that removing parking spaces and/or car lanes from a street does not decrease local business revenue but might increase them. This has to do with better accessibility, cyclists’ consumer competitiveness and higher frequency of visiting a place (a street with shops, e.g.).^{xvi}

Because of the variables of a given location the effect may differ according to factors like a street, business, size of the city/town, location of the street/area, people’s shopping patterns, population characteristics, purchase power etc. Strøget, a high street located in the city centre of Copenhagen closed to cars in 1962. Within a year sales were up 30%, the number of pedestrians increased 35%.^{xvii} Malmö, an example that we will focus on in this study, started gradually pedestrianising streets in the summer of 1978. Subsequently, a sales analysis in 1981 showed that revenues had increased thereafter. A report commissioned in 1983 had self-explanatory title “Pedestrian streets vitalize city centre” (Persson 1983 cited in Kärrholm 2012). Pedestrian streets started to emerge in Sweden (and elsewhere) in the 1960-70s as a response to a recent and sudden car-oriented city planning. Decades later there was no clear evidence that city centre areas would have died out because of closing them to cars (Nordqvist 1989 cited in Kärrholm 2012).

The Swedish Council for Building Research and The Swedish Transport and Communications Research Board commissioned a study for their project “Balancing car accessibility and good urban environment” in 2000. The study was conducted in Linköping, Sweden. Nearly 50% of the respondents would have wanted to see a city centre even more focused on pedestrians, bicycles, reduced speed limits and better public transport. Ca 20% would have wanted to see better access for cars. Another quite simple but a clear and generally applicable observation in this study was that in city centres most of the shopping is done on foot

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anyway since people can and will take a walk (during lunch hours) to a shop, café or restaurant.^{xviii} This decade in Salt Lake City^{xix} a street was made bicycle friendlier by removing diagonal parking spaces, adding protected bicycle lanes thus increasing bicycle traffic by 30%. Car lanes were preserved. A business owner who was interviewed had noticed his sales up by 20% a year into the street makeover.^{xx}

Urban planning is a complex issue. Pedestrianisation forms a part of that discipline and should be planned and executed accordingly. In worst cases projects turn out to be a waste of taxpayers money, if the street/area is reopened to traffic again or will simply not attract people, therefore businesses. In the latter case a pedestrian area can simply “be a pedestrian area for car drivers” and export the traffic, congestion, unattractive public spaces problem elsewhere.^{xxi} Every case is different and requires sufficient planning and studying. Pedestrianisation is always possible and increasingly desirable. A gradual approach might be advisable as well, as expecting an overnight change or disregarding possible competition from another competing region might be counterproductive.

Mini-case studies

There is no major trend in contemporary urban planning, theory or practice that would suggest allocating more space for cars on the street in order to improve a public space, make it more attractive to residents and tourists. Banning cars from areas even the size of entire districts is a policy some cities can afford, as they can build on existing bicycle routes and culture and excellent public transport. Such change is hard to implement overnight, but bold steps can be encouraging if proper stakeholder consultation is done and designers are consulted. Below are some examples from cities and capitals across the world. The Estonian-American architect Louis Kahn has noted: “In a city the street must be supreme. It is the first institution of the city. The street is a room by agreement, a community room, the walls of which belong to the donors, dedicated to the city for common use. Its ceiling is the sky. Today, streets are disinterested movements not at all belonging to the houses that front them. So you have no streets. You have roads, but you have no streets.”^{xxii}

Mass public transport in the long term creates healthier and economically better cities.^{xxiii} The UN Habitat 2013 study noted that streets have over recent decades been deprived of their importance and role in shaping the essence of cities.^{xxiv} LSE Cities at London School of Economics and Political Science published a study “Towards New Urban Mobility: The case of London and Berlin” in September 2015.^{xxv} Its conclusions recognized that understanding what the future will bring in terms of mobility requires we understand the trends today. Changes in mobility habits and demands do not adhere to the older and established motorization logic and policy makers need to accept and embrace alternatives such as cycling and walking, car-pooling and electric vehicles. Furthermore: “Important aspects of the social role of cities and maintaining urban community can be undermined by excessive car use through the deterioration of urban interaction and public space. Car use has been linked to a range of negative health impacts. The current promotion of “active travel” or the “slow modes” of walking and cycling has been a response to these concerns. Reclaiming road space is a key aspect of this change and cuts across design interventions such as the pedestrianisation of city streets, pavement widening and cycle lanes.”^{xxvi}

Below are some examples from the wider world regarding pedestrianisation, bicycles and how cities go about with their public spaces. The Anholt-GfK Roper City Brand Index (CBI) report (2009) ranked Paris as a 1st city brand in the world, London 3rd, New York 5th, Vienna 9th, Madrid 10th and in a similar study on European cities Milan was 5th, Oslo 13th and Dublin 17th. Helsinki is 10th on the most liveable cities list by the Economist Intelligence Unit.^{xxvii}

Having proper bicycling facilities has become a hygiene factor, as it is no longer a serious question whether or not to have proper bicycle lanes in a city. The frontier is much farther than such a consideration. In the Netherlands solar bicycle lanes were installed in 2014 and have now produced energy equivalent of three

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households' yearly consumption.^{xxviii} In Copenhagen there are 7 bicycle bridges and one will be built between 65 metres above the ground, connecting two skyscrapers.^{xxix} Extravagant or not, this is where the frontier is.

Personal preferences aside when it comes to leisure destinations or transport methods, it should be noted that these cities are famous, sought-after destinations in terms of tourism, investment, relocation, and they are seriously considering making entire centres car-free. When cities like these talk, one should take note.

New York Times Square

A vivid illustration is the pedestrianisation of parts of Time Square in New York City – arguably one of the most high profile projects to date – that resulted in that 75% of people think it has improved the area and economic activity went up by a staggering 22% between 2007 and 2011 (compared to a 9% increase in city growth during a time of economic crisis). According to the 2012 Economic Impact Study pedestrian activity has rose by 11%, with 35% less accidents with pedestrians and 63% less traffic accidents.^{xxx}

The National Main Street Center in USA, an advocacy group, says that reclaiming streets as public spaces where people spend their time can provide a platform for not only new cafés and restaurants, but also pop-up businesses and shops.^{xxxi} Current experiences shows that their lifetime can last beyond the initial excitement of opening a new street. According to the Alliance for Biking and Walking Benchmarking Project, cycling/walking projects create 11-14 jobs per 1 mln USD invested compared with 7 jobs created per 1 mln USD invested in motorways.^{xxxii} About 700 communities in the country have adopted what they call Complete Streets policies and the U.S. Department of Transportation has announced it will further prioritize creating safer streets for pedestrians and bicyclists.^{xxxiii}

London

London's Oxford Circus Diagonal helped stimulate a 25% increase in the turnover of its adjacent stores. Places that have improved the public realm and design of streets are outpacing other areas, even in the face of falling retail spending. London's Oxford Circus Diagonal saw a 25% increase in turnover in the stores immediately adjacent – rising from £20m to £25m in the year after completion of the scheme.^{xxxiv}

A LSECities (part of London School of Economics) study from September 2015 has concluded that there are visible trends in urban mobility London (and Berlin) towards walking, cycling, public and shared transport, whilst notable reductions in private car use and ownership.^{xxxv} Interestingly it has been measured that London traffic on average moves slower than a cyclist and that UK drivers waste 106 days of their lives searching for parking spots.^{xxxvi}

Starting from 2020 London will introduce Ultra Low Emissions Zones for all motor vehicles, in the same area where there is currently a Congestion Charge Zone and it will be in place 24/7. Cameras will read the car number plate upon arrival and exit and consult with a database.^{xxxvii}

Milan

The list of European cities announcing to cut or abolish car traffic in their centres is growing quite fast. In July 2015 Milan declared its plan to tackle congestion by means of “total pedestrianisation of the historical center.” Public transport vouchers are given to commuters who leave their car at home.^{xxxviii}

Madrid

In the summer of 2015 Madrid became a spearhead in the quest for better places. As an anti-pollution measure, Madrid administration declared it will reduce traffic in the centre by banning non-resident parking.^{xxxix}

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The immediate effect? Some streets just outside the centre were fully parked. However, no dramatic increase in congestion outside the centre or overbookings in private parking houses was noticed.^{xli} Electric car sharing (Car2Go), taxis, buses, school buses etc were allowed to enter the city. Implementation was simple: parking meters were turned off. “While city officials said it is still too early to assess whether the restrictions have brought down the number of vehicles in the city, the downtown area was experiencing fewer traffic jams”^{xlii}, according to national daily El Pais.

Dublin

Also in 2015 Dublin declared it desires a car-free centre as of 2017. Retailers have protested, citing that it impedes those that wish to arrive by private car (who also happen to buy more, according to them). A preliminary survey ordered by those against the move noted that since people who park their cars will walk 300-400 m to their destinations, a 25% drop in sales could be expected.^{xliii} This study asking relevant, but still hypothetical questions can be compared to a study in shopping and mobility patterns on two already pedestrianised shopping streets, Grafton Street and Henry Street.^{xliv} Among many findings was that cyclists spend nearly as much as drivers.

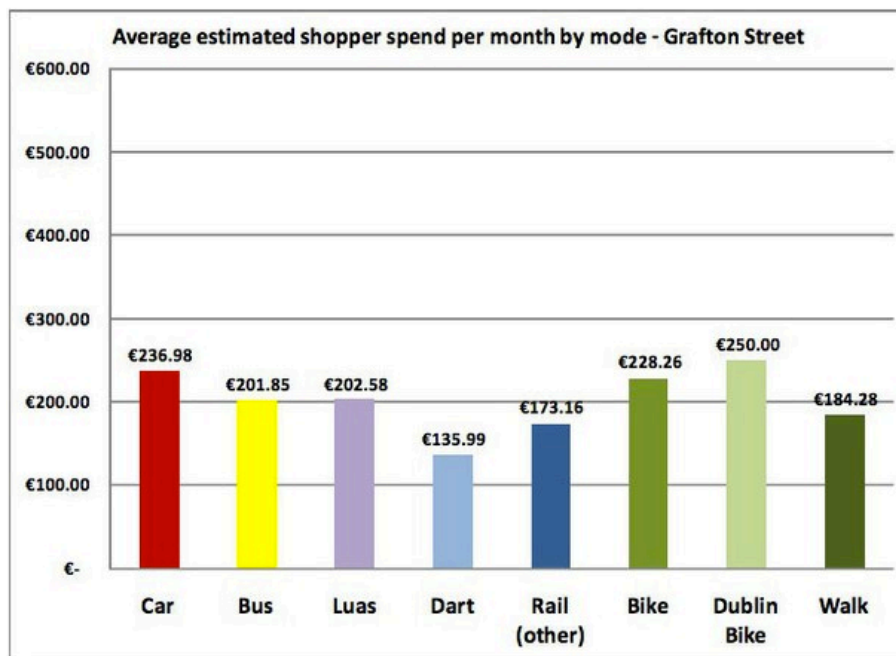


Figure 1^{xlv}

All things considered, different parties admit that it is still early days when it comes to clarity on how this will be implemented. Public consultations have only just begun.^{xlvi} Ray Hernan, the chief executive of Arnotts, a department store and a prominent member of Retail Ireland does not oppose the plan, however he would like to see all stakeholders' concerns' addressed in future studies and planning.^{xlvii}

Toronto

In Toronto a similar study was done in a shopping area and central street, Bloor Street in 2008. 61 merchants and 538 patrons were consulted. Patrons arriving on foot or bicycle spent the most money and had the highest visiting frequency per month and more business owners would have wanted to see even better possibilities for cyclists and pedestrians. Also, Figure 2 demonstrates, the contribution of pedestrians and cyclists should not be underestimated in the overall revenue stream for shops.

Table 5. Money spent in the area per month							
	Live or work in the area (294)	Live and work outside the area (242)	Walk (246)	Bicycle (64)	Public Transit (171)	Car (55)	Total (536)
< \$25	6%	31%	8%	11%	29%	24%	17%
\$25-\$99	21%	35%	16%	39%	37%	37%	27%
\$100-\$499	50%	29%	52%	42%	28%	30%	41%
\$500-\$999	14%	5%	17%	3%	3%	4%	10%
> \$1,000	9%	0%	7%	5%	3%	5%	5%

Figure 2^{xlvi}

Paris

Even Paris is expanding its portfolio of bicycle roads, car/bike rentals and car-free spaces with creating pedestrian areas along the river Seine as of 2016. It has held partial and complete car free days with success.^{xlvi} Clearly, Paris is unique and near incomparable, but it is again worthwhile to note that these no-car initiatives are being tested (if not fully implemented) everywhere. The current mayor Anne Hidalgo wants to expand the car-free areas and make it a monthly thing.^{lv} Even Champs-Élysée will decrease the volume of cars (8 lanes currently), add bicycle and bus tracks by 2025.^{lvii} In addition, Paris wants to remove 55 000 parking spaces from the streets every year during the next 2 decades.^{lviii} In other words, pedestrianisation is *en vogue*.

Vienna

Vienna has converted one of its main streets, Mariahilferstrasse to a (semi)pedestrian area. The 1.6 km long street was daily used by 10 000 cars and 60 000 pedestrians. There were just two lanes, but also adjacent parking lanes that took up potential commercial space. There are now two shared space zones (Begegnungszone) where cars are allowed access. The space is shared with pedestrians, cyclists and the claimed space has been allocated to street furniture, plants and places to sit. The latter was frequently requested at the pre-construction phase public consultations.^{lv}

Oslo

Oslo recently declared its plan to make the centre car free by 2019,^{lv} accompanied naturally by improving bicycle roads (additional 60km worth of lanes),^{lvi} pedestrian infrastructure, incentivising purchase of electric cars and bicycles, and boosting public transport. The ban would render Oslo the first European capital to do this.^{lvii} This is part of a larger effort to reduce car traffic 20% throughout the city by 2019 (year of next municipal elections) and 30% by 2030.^{lviii} lix Though this is a left-green initiative, all political parties have backed the move.^{lx}

The reasoning behind this was manifold. Pollution was a concern: CO2 emissions are to be decreased 50% by 2020, compared with 1990s levels.^{lxi} The population in Oslo is 600 000 people, there are 350 000 cars.^{lxii} As cold winters require studded tires, it can pollute 100 times more than normal tires (Miljødirektoratet, the National Environment Agency).^{lxiii}

According to a 2014 survey, a strong 83% of Oslo inhabitants think they have “very good” access to public transport.^{lxiv} More than 50% of the households does not own a private car.^{lxv} On average 15 000 – 18 000 vehicles drive in that area every day.^{lxvi} The area under question (Ring 1) houses 1015 inhabitants,^{lxvii} however some 90 000 work with ca 6000 cars.^{lxviii} Surveys conducted by the Institute of Transport Economics (Transportøkonomisk institutt, TØI) show that of all the work commutes to the centre 7% use private cars and 64% public transport, while 22 % walks and 7% cycles.^{lxix}

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11 shopping centres are located in the planned area. Oslo Commercial Association (*Oslo handelsstands forening*, OHF) among others^{lxx} expressed fears^{lxxi} that the impact will be negative.^{lxxii} If there is less accessibility, there are less people, clients and thus revenue. While accessibility is not the issue, the way of achieving it is. TØI on the other hand argued, based on their surveys, that better accessibility is provided with this policy, as already only 7 % of people going to the centre use cars.^{lxxiii}

One good and quite universal question the ensued debate has raised is this – will a city lose its uniqueness when it does away with cars or limits them?^{lxxiv} This was asked in Oslo and it can certainly be asked elsewhere. Why should there be fewer customers when there is more space for them to stroll, sit, chat, spend time with friends or family, “windowshop”, walk their dogs, have lunch or coffee? They will fill the place that has now been opened and freed for them – keywords quality policies, stakeholder consultation, planning, construction and communication. The audience will be there. It is up to the stakeholders to help steer which the audience will be and the marketers to place their products properly.



Figure 3 ^{lxxv}

Helsinki

Helsinki has a prime city brand. It is among the top 20 most competitive cities (Global Urban Competitiveness Project 2008). It is the 10th most liveable city in the world according to Economist. ^{lxxvi} It, too, wants to decrease car usage^{lxxvii} significantly by 2025 but in a smarter way, namely improving its public transportation system and alternatives so that using a private car will simply not be desirable. This would involve on-demand, mobile app based mobility purchasing solutions, with focus on ease of use, flexibility and convenience.^{lxxviii} Ferries, shared bikes and cars, buses, taxi apps will all be connected to a central solution that would then be at one's service.

The city wants to increase biking to a 15% share of the general commute by 2020 and distance travelled on bikes by 30% by 2025. ^{lxxix} Today 11% of trips are made on bike.^{lxxx} To this end study on which pace of increasing investments is best was commissioned by the city (*Pyöräilyn hyödyt ja kustannukset Helsingissä*).

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Currently Helsinki on average cycle 270 km per year. Of that 125 km/year are journeys to work. They are currently evaluating and calculating costs-benefits of further investments. Currently they are investing 5 mln € a year. Helping to make this decision is a 1:8 correlation found in the study. Namely macro socio-economic benefits give every 1 € invested a 7,8 € return (estimation) in health benefits and transport time saved. Cost side: accidents and the investments. The study also mentions similar health benefits studied and measured in the UK (same ratio over 10), in Denmark every kilometre cycled yields a 1,22 Danish Krone benefit to society (km per car respectively 0,69). Aside from these relevant, clear and necessary health and macroeconomic benefits the study also mentions that real estate value will increase in the vicinity of bicycle routes.

The most recent big project was Baana. In 2012 a pedestrian and bicycle road was built, converting an old canyon railway.^{lxxxix} It is 1.3 km long, running from Mannerheimintie to the Länsilinkki on Mechelininkatu.^{lxxxii} It has proved a success and popular among residents. Similar landmark projects or a wider push for better infrastructure should be foreseen, if Helsinki wishes to reclaim its position in the Copenhagenize Index (15th place in 2011).^{lxxxiii}

It has been observed that with current trends in Helsinki, it is safe to say that the more people move to Helsinki, the less cars there will be.^{lxxxiv}

Lessons learned

What can be observed from these smaller case studies and examples is the following:

- Improving the conditions and inviting more people to use bicycles (or walk or use public transport) requires:
 - Above all, safety
 - Infrastructure and means (enough public bicycles, trains, buses etc)
 - Active promotion
- Pedestrianisation raises revenue of local business as research shows
- Cyclists and pedestrians give a considerable contribution to business revenues
- On the whole pedestrianisation improves accessibility to shops and businesses
- The attraction of the place, street and city, increases with pedestrianisation
- Pedestrianised spaces and increasing their share of the public space has become elementary
- Having proper bicycle infrastructure is a hygiene factor
- Pedestrianisation matters and world cities engage in it
- Furthermore, world cities invest in researching what are the trends, expectations and possible future behaviours in urban life, in order to anticipate it and be ahead of the curve
- Better conditions for cyclists and pedestrians increase a city's brand value, attracting:
 - Tourists, international students and talents
 - Investments
- Studies indicate, among other things, that people desire to see less cars in urban life / city centres
- Public spaces that are accessible and not occupied by/designed for cars are natural to a city, the way it is perceived internally and externally
- Improving public spaces will improve a city's uniqueness, more than cars and parking lots will

Case study Malmö

Malmö is located in South-West Sweden in the Skåne region. It's the 3rd largest city with a population of 318 107 (2014) and growing. 300 000 inhabitants was reached in April 2011. Population density is 1 989 persons per km². The Malmö region has 670 000 people and Skåne ca 1.3 million. It used to be an industrial town with the vessel building company Kockums as its main employer. They closed in the second half of the 1980s. Malmö is now applauded for having become a service-oriented economy of the region.

Evolution of public spaces in Sweden

Mattias Kärrholm, associate professor at Lund University analyses in his book "Retailising Space: Architecture, Retail and the Territorialisation of Public Space" that Malmö has been a success story when it comes to retail space and pedestrianisation. He calls these processes territorialisation, a stabilization of a consumption territory. Thanks to the pedestrianisation projects the city centre, he argues, has established itself as a shopping area (Kärrholm, 2012).^{lxxxv} During the 1960s-70s Sweden underwent mass suburbanization, which in turn evoked an "urban renaissance" in the 1980s (Gehl and Gemzöe 1996, Bergman 2003 cited in Kärrholm 2012). Walking streets became more and more popular in Sweden during this time, especially when connected to a market place. Parking houses and cellars were introduced to house cars.^{lxxxvi} 1980s and 1990s onwards Sweden and the Western world in general moved towards individual consumer patterns, making shopping as a process a wider and more social event. Buying things was more and more if not an event or a pastime, then certainly a leisurely activity and a more related to people's identity (Zukin 2004 cited in Kärrholm 2012).

Enter urban design. Or re-enter, one should say as public places were now coming back to the larger picture of urban life. 1990s saw renovation of these public spaces in Sweden, with about 70 cities having undergone an urban renewal project, which all contributed to making a city centre more of a "unified place rather than a grid connecting different kinds of places."^{lxxxvii} In 1988 the Swedish Urban Environment Council (*Stadsmiljörådet*) was founded. Moreover, the decline of shopping malls in Malmö centre alone from 18 in 1975 to none in 2008 shows that department stores no-longer met the now manifold, identity, life-style related requirements of clients.

In Malmö this resulted in pushing department stores to the more suburban areas and making the city centre more accessible and a pleasant environment to pedestrians and bicyclists. As mentioned before, the city underwent a big change in 1995-mid 2000s. During 1999-2005 in the Skåne region retail spaces increased by 41%, with another 72% planned in 2006. Malmö proclaimed the majority of these investments (Bergström and Wikström 2002, Länsstyrelsen Skåne län 2007). Kärrholm notes that in 2009 the centre had "a larger share of the choice product retailing than all the car-dependent shopping centres taken together".^{lxxxviii} He continues: "One main aspect of this success (in addition to focusing on choice products rather than food) is the pedestrian precinct, constituting the centre of recent urban investments, improvements and identity-buildings, and also contributing to a certain homogenisation."^{lxxxix}

Malmö city brand

Malmö is a highly valued place, with the economy and population growing. By the 2000s the city was considered as a top example of a former industrial city that converted itself to an expanding regional centre. Bicycling is a growing feature of not only urban planning in Malmö (and elsewhere), but also public and parliamentary debate and motions across the political spectrum in Sweden.^{xc}

In the season of 2013/2014 584 000 bicycles were sold in Sweden, a 5% increase with previous year and a 17% compared with 2010.^{xcii} Add service, spare-parts and accessories on top of that. This branch gives employment to a number of people and could do the same in any region, also in Tallinn or Estonia. According to 2014 figures: 20% of Swedes cycle to work/school daily, 44% cycle for leisure during spring-summer period, nearly 30% cycles to work or school at least once a week, ca 20% cycle to work/school during autumn-winter and ca 10% cycle daily during autumn-winter.

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Awards and recognitions include City Centre of The Year (2000, 2005), Bicycle Town of the Year (2004), Sweden's Fairtrade City (2006), Lilla Torg, a square, received the Meeting Place of the Year award in 2002. According to the Copenhagenize Index Malmö is at 6th place^{xcii} in 2015, 9th place in 2013^{xciii} beating cities like Stockholm, Göteborg, Dublin, Tokyo and Berlin. Cykelfrämjandet, the Swedish national cycling advocacy organization, gave its bicycle promotion award to Malmö city in 2015.^{xciv}

It is a secondary or contender city not only to Stockholm, the capital, but also to Copenhagen, the bicycle and pedestrian capital of the world (whenever Amsterdam does not hold the title). This can be seen as a driving factor for creating a better image and place of Malmö, in order not to be called “a suburb of Copenhagen”, the occasional description.^{xcv} The cities might well emerge more into a twin entity in the coming decades. This region is a great resource not only in terms of place branding, bicycle and pedestrian friendly urban planning, sustainable development, but also co-operation and joint projects.

Public transport and infrastructure

In 2004-2010 an underground metro tunnel was built in Malmö (Citytunneln). Investments came from the city, but also government, Skåne region, EU and local private actors (Skånemejerier, Sunfleet, E-on). There are programs to encourage higher usage of the trains, link car commuters to trains, increase electric car usage and expand the cycle network (Environmental Program for the City of Malmö 2009-2020 and Improving Malmö's Traffic Environment).^{xcvi} Malmö regularly measures traffic behaviour. Between 2003-2008 the amount of journeys per person remained constant, while the share of cars dropped from 52% to 41%. Bicycle usage increased from 20% to 23%, walking from 14% to 20% and train rides from 3% to 5%. Malmö realises that the basis for a better urban and living environment are providing quality alternatives to cars. That is why public transport needs to be as good as or better than taking a private car. This applies to ease of use, safety (security cameras in buses and bus stops), real-time traffic information apps, cleanliness, timeliness and convenience.

When speaking about larger infrastructure projects, the Øresund bridge is already an accomplishment. However, a vision called Øresund 2070 by Skanska and Sweco, two major construction companies, considers adding train lines, tunnels, 1 million new homes and even a bicycle track on the bridge.^{xcvii} One might dismiss this as fantasy, however, the bridge and connected tunnel is a reality. Currently a railway tunnel is being built between Roedby and Fehmarn, reducing the Copenhagen-Hamburg car-ride up to 90 minutes. The undersea Fehmarn tunnel is estimated to open at 2024, costing at 8 bln €, of which 589 mln € will be funded by the EU.^{xcviii}

So envisaging a seamless cross-border transport system is not at all a fantasy. When the bridge was about to be built the Danes asked and campaigned for a bicycle lane (“one can cycle on the Golden Gate in San Francisco, so why not?”)^{xcix}, the Swedish officials involved said no despite even traffic experts agreeing that it could be done.^c

Kärholm emphasises that contemporary and varied factors must be taken into account when judging whether pedestrianisation is successful or not. “From the 1990s and onwards, the success or failure of pedestrianisation must be judged by a criteria such as branding, location, accessibility and attractiveness. It is about good communications, a focus on fashion and specialists rather than on everyday goods, and precincts that are large enough to attract shoppers.”^{ci}

Even more so, this has become a natural part of the city in terms of public demand, experience and economic development, as urban planners, politicians, investors and retailers all are interested in the process.

There are two large public bicycle stations (Bike&Ride) – Malmö central and Hyllie station. The former can accommodate up to 1500 bicycles. Both these underground garage are huge facilities with room for 1000

bicycles and have resting rooms, toilets safety lockers, pumps, showers, repair space, bike wash, a locked area parking.

Bicycling in Malmö

In Malmö 30% of traffic is on bicycles with more than 10 000 cyclists travelling each day, making over 1000 trips.^{cii} There are nearly 500 km of bicycle lanes - separate from car lanes. Some 27% of trips to work are done on bicycles in the greater Malmö area. 38% people cycle to work inside Malmö, compared to 34% using cars. Bicycle traffic increased 12.7% in Malmö during 2011-2013.^{ciii} It is important to separate bicycle lanes not only from car lanes, but also from pedestrians, since they should be treated as separate traffic group, which they of course are.^{civ}

Methods used

Malmö has ca 490 km of bicycle lanes, distance from city centre to the perimeter is ca 10 km.^{cv} Nobody in Sweden would doubt that *Stockholmare*, *Göteborgare* and *Malmöiter* all cycle, but Malmö does stand out.^{cvi} It has 1.6 meters of bicycle lanes per inhabitant and it is praised namely for its existing infrastructure, public campaigning, measurement and statistics and policies.

Methods include street paving, traffic signs for bicycle lanes and pedestrian areas, priority signalling, plants, street furniture, campaigns, stakeholder engagement. Also bicycle stands, fountains, areas allocated for cafés or sitting, (pop-up) shops. Public spaces, if designed and executed professionally, invites people to claim their “own” spot where they will make the habit of sitting, reading, chatting, sunbathing etc.

Campaigning and awareness creation

Malmö has made an effort since the 2000s to make people more attracted to public transport and cycling. There are campaigns that raise awareness (on public transport, better public spaces, bicycles, using a reflector etc) and consult people, even for eco-driving in order to reduce fuel consumption. The latter is aimed for those who cannot or do not wish to not use a (private) car. It is important to differentiate target groups. This program ran 2005-2008 and reduced fuel costs 10-15% for the participants. Also, car-pooling facilities have been provided by Malmö city and Sunfleet.^{cvii}

Another example, the **Vägvalet** campaign gathered some 1 000 ideas from citizens on “Which road should we take in order to reduce car traffic in Malmö?”

Since 2007 the **No Ridiculous Car Journeys** (*Inga löjliga bilresor*) campaign has become an annual event.^{cviii} Criteria: less than 5 km is no excuse to take a car. Studied that preceded the campaign in 2003 showed that about 50% car trips were less than 5 km in length.^{cix} Helsingborg, Kristianstad and Umeå have run these campaigns as well.



Figure 4^{cx}

Friendly Roads to School focused on parents and children cycling to school. There are obvious health benefits for everybody, not to mention security improvements that a smaller volume of cars on a less nervous peak hour entails. There are children's events (Bikesafari) and kindergarten use bicycles to drive children around.

In 2005-2007 the **New Address, New Travelling Habits** program entailed Malmö city offering newcomers travel advice by letter and phone. Even free public transport or rental bicycle monthly vouchers were given to those using cars. Results measured later showed that this approach worked better when done with SMEs (small and medium sized enterprises).

Business on Bikes. Most importantly perhaps is the co-operation with companies. They agreed to work with the city on encouraging their staff to consider changing their travel habits. The city organized seminars and offered guidance on how the companies could suggest alternative paths and methods for the staff's daily commute. The project helped 53 companies replace the so-called ridiculous car journeys with bicycles journeys. In 2006 altogether 91 companies participated.

General and parking

- Taking a bicycle to a public transport vehicle, bus or train, is elementary and provided for
- About 10 pumping stations in the centre
- Counting stations that measure cyclists and collect data, also manual data collection is done every year.

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- Over 60 000 municipal bicycle parking spaces
- Parking facilities
- Underground garage at the railway station – huge facility with room for 1000 bicycles, has resting rooms, toilets safety lockers, pumps, showers, repair space, bike wash, a locked area parking.
- Bus terminals have bicycle parking
- On streets (i.e. not big parking lots or houses) the goal is to have a comfortable 70 cm wide space between adjacently parked bicycles.



Figure 5^{cxi}

Routes

- Street lighting is prioritised for safety and also convenience. The current trend is to have sensory street lighting that lights up when there are people approaching
- Tunnels are well lit and have an open plan
- At some places (like when bicycle lane leads over a square) pilot lights are at the edge of the lane
- Wide curves to avoid accidents
- Unified and clear sign posting, mainly to and from centre, but other important destinations as well
- Maps on streets and publishing a free bike map (published over 40 years)
- Bike paths are named



Figure 6^{cxii}

Pavement

- Street paving differs in regions. In the outer regions asphalt dominates, towards the centre greater variation can be seen in order to differentiate pedestrian and bicycle lanes, overlappings etc
- Light traffic lanes with over 3 m in width have a white line painted on it in order to separate cyclists and pedestrians



Figure 7^{cxiii}

Crossings

- Speed bumps are installed for cars in crossings with higher pedestrian and cyclist volume. In addition that makes the crossing level the same as the street level, making the ride smoother for cyclists
- Level crossings for pedestrians and cyclists
- Crossings with traffic lights have priority signalling for cyclists
- Radars are used to detect bikes and make flow of traffic more easier and avoid unnecessary waiting stops
- “Cycle box” – a box painted right before the crossing, giving them priority when the lights turn green
- When cyclists wait at a crossing, they can hang on to a balustrade installed for them
- Where space permits, open turning possibilities are built for cyclists, in order to avoid unnecessary waiting



Figure 8^{cxiv}

Lessons from Malmö

- Taking a bicycle to and from anywhere is made possible, convenient and safe
- Bicycles can be easily combined with other public transport means (taken onto a bus, e.g.)
- Raising awareness and campaigns create change, but also needs constant engagement
- Campaigns and policies should be tailored for all target groups, differentiating between age groups and preferred transport
- Investment in safety is a must, giving priority signalling at crossings, using “cycle boxes”, street lighting etc
- Investment in infrastructure is vital, be it separated bicycle lanes, elevated crossings, a balustrade, speed bumps etc.
- Involve stakeholders, the citizens, also SMEs in campaigns and getting people to cycle more
- Measure precisely and regularly traffic volumes in order to get accurate and updated picture, in order to implement precise policies and use tax-payer money responsively
- Claiming a bicycle friendly city reputation can make a city with previously low brand image more attractive to people and businesses, even internationally so

Conclusions and recommendation for Tallinn

The bicycle is a tool. It is a tool to improve a city brand, meaning its attractiveness to residents, tourists, (international) students, talents and investments. Making a city more pedestrian and bicycle friendly necessitates many things that will improve urban life, both by soft and hard factors. It raises local businesses' revenues. It is an elementary and integral part of a modern society. One does not have to be a bicycle fan in order to appreciate and understand the potential that this can bring.

As we have seen, making a city or a district or an area more open to transport methods other than private cars means that these alternatives must be provided. The quality of the service provided and public awareness created can and will create attraction, if executed correctly and involving stakeholders from the starts, i.e. anticipating their needs and desires.

Tallinn's envisaged High Street (Viru square extending towards Narva maantee and Pärnu maantee) area is already at an advantageous position because of the Viru shopping centre bus terminal. That provides not only excellent accessibility, but also guarantees a presence of people in the area. A central question to Viru square (and to Tallinn's city branding in general, for that matter) – is the place capitalizing on its current assets? The constant failure of businesses in the very heart of the city (beginning of Narva maantee) and where there are plenty of people throughout the day is a clear sign that there is more to be done.^{cxv}

There is most certainly plenty of data and potential involving different age groups, profiles, gender, is there a choice of what people can do in the area, what parts of the space are used and for what purpose, is the space used throughout the day or not, is the place safe (the answer is no), can people sit, play chess, do vehicles or people dominate? Would you meet a friend or children there?^{cxvi} Has the city given thought to what benefits a good, i.e. attractive and popular public space would give to integration?

Bringing it all together

The Tallinn High Street project captures the imagination and thus invites many a policy recommendations. What is crucial - and extends beyond this project and could be considered vital to its success - is above all raising awareness of the health, macro economic, business and urban environment benefits of walking, cycling, car sharing and public transport. Fostering change in the way people perceive cycling compared to a private car is vital.

In addition to converting this area into a pedestrian and bicycle friendly place, Tallinn could consider installing a public bike rental station. Not only would the location be ideal because it is in the centre, next to a cinema, post office, a shopping area, close to the harbour and old town but it is also next to the bus terminal. Installing a public bike rental station would of course need proper preparations like feasibility studies, setting criteria, consulting with designers and making public procurements. However, Tallinn's High Street project is an ideal occasion for building a central or key public bicycle station that could be integrated with other public transport means like Malmö has done. Of course, it will benefit the High Street project if a similar large bicycle station is opened at the bus or train station and/or smaller bicycle stations across the city. The same applies for expanding and promoting the public electric car rental (Elmo, for example).

Other policy recommendations stemming from case studies above include:

- Different parallel strategies should be deployed in order to address different target groups
 - Car drivers
 - Cyclists
 - Pedestrians
 - Bus, tram and/or train passengers
- Less room and priority for cars in cities is a clear trend, practised by top brand cities

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- Consider decreasing parking spaces on streets as tools to decrease car traffic
- Electric car promotion
- ICT and public transport – help foster technologies and their use to optimize public transportation usage
- Car free zones
- Car free days, once a month for example
- Consult with experts (the world famous Jan Gehl or Cycling Embassy Denmark to name but a few) on how to improve public spaces and urban life
- Public campaigns encouraging people to cycle and walk.

One innovative and perhaps practical idea could be teaming up with Helsinki. Why not create an integrated and seamless cross-border transportation system, with a common bike rental system between the two cities? There are mutual benefits and frontrunner value in terms of future co-operations between the two cities and certainly international place branding value with potential spill-over effects to other areas than urban planning and bicycles.

Tallinn should give thought to regional and thematic co-operation with Helsinki (*Talsinki*), in order to not only profit itself as a relative second tier city vis-à-vis its northern neighbour, but also create mutual benefits as the case of Copenhagen-Malmö or other intercity branding and investment promotion co-operation examples have shown. As a very first step, Helsinki (as all of the case study subjects in this study) should be regarded as examples of contemporary cities and an inspiration.

Improving public spaces in order to bridge the gap between 21st century trends and people's expectations needs thorough consideration. Not least if Tallinn is serious about being a candidate for the European Green Capital Award in 2018.^{cxvii}

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