



Ride the City

A New Way of Living the City and its Unexpected Places

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The history of the bicycle has always been linked to the history of the modern and contemporary city. The bicycle was one of the first popular means of transport to circulate around the city and in recent years has returned to the crest of the wave not only as a means of transport, but as a design object, an emblem of fashion and technology.

The architects of the twentieth century were very interested in the myth of the automobile, their experimentation included a car-based utopia, thus planning the expansion of our cities through neighborhoods designed to accommodate vehicular mobility.¹ Today the expansion of the cities has stopped and the needs of the city are different. The theme of land consumption and the new needs of the planet lead us to rethink these utopias in a current key. Taking into account current requests, a utopian bicycle city, as it was the city of the car, could be a pilot model in defining

1 – Le Corbusier, formulated some theories on the myth of the automobile. In the collection of writings published in 1922 *Vers une architecture* Le Corbusier assimilates the Greek temple to the car, the Parthenon at the Delage grand Sport. The similitude regards the process that led to the realization of the monument as to that of the automobile, the same approach ‘to doing’ binds the classical construction, symbol of the past to the car, a technological object symbolically linked to the future.

The architect Frank Lloyd Wright, from the thirties, formulates the idea of a new society based on the architectural model of the *Broadacre City*. This model uses the car and the new communication technologies as a means of connecting city and countryside. The car is the means that allows you to move from one place to another quickly and structure the new expansion of the city.

strategies and in designing new neighborhoods and new cities. As Rem Koolhaas explains, speaking about “the culture of congestion”, some city models have the power to transform almost non-existent opportunities into tangible and real opportunities for social development and interaction.² So, cities with a well-defined territorial structure and morphology can also enclose new opportunities for transformation and adaptation to the needs of a new myth. As Carlo Ratti, director of MIT Senseable City Lab,³ an architect and engineer expert on urban mobility projects, including the *Copenhagen Wheel*,⁴ says, we have the right to think and imagine the cities of tomorrow, according to our needs, without complexes, provided that the goal is progress, where technologies will play a fundamental role.⁵

The new utopian city will have to put together those interventions that are called top-down as the realization of infrastructures for slow mobility, bike-sharing services, closing days for vehicular traffic and bottom-up initiatives, coming from citizens and city users as critical mass movement, shared-cycle workshops, cycling advocacy, bicycle tours and group excursions organization.

To support the emergence of the new utopia, it is necessary to understand the true value of sustainable mobility from those of collective benefits such as the improvement of air quality, the reduction of cardiovascular diseases, obesity, diabetes and hypertension and, consequently, reducing national health expenditure and health benefits: the constant effort of the pedaling oxygen keeps the muscles of the lower limbs and the respiratory system active. The collective benefits have not only health effects, but also

2 – Rem Koolhaas deals with the “culture of congestion” in his book *Delirious New York, A Retroactive Manifesto for Manhattan* published in 1978, where the architect analyzes Manhattan and uses it as a metaphor for the wide variety of human behavior.

3 – It is a scientific laboratory that studies how digital technologies are changing the way people live and their implications on an urban scale. Founded and directed by Carlo Ratti in 2004, the Department of Studies and Urban Planning of the Massachusetts Institute of Technology.

4 – Copenhagen Wheel is a device that can be applied to any bicycle turning it into a hybrid vehicle. It uses the energy of the wheel that is idling or used in a brake, stores it in the batteries and reuses it when needed to make a climb or recovery less tiring. The wheel is equipped with GPS locator and other devices that allows it to be always connected with a smartphone or other devices like that.

5 – Carlo Ratti explains his theory about the city of the future in the publication *The City of Tomorrow: Sensors, Networks, Hackers, and the Future of Urban Life* published in 2016. Ratti in the book argues that the city of the future, their design and evolution will be consistently based on technological progress.

effects on the economy of families with a reduction in costs dedicated to the car, on economic policy such as reducing energy dependency and saving non-renewable resources. The bicycle is a *social* vehicle, symbol of the democratization of mobility, autonomy, accessibility and ecology. Cycling is probably the cheapest form of transportation that exists today and you do not have to pay for parking. The bicycle

more than many others (means of transport) is a measure of slow territory, it allows us to go through spaces without leaving us indifferent. The sweet speed of the bike allows us to experience the landscape in an intimate manner, dwelling on what is taking us around and noticing what, at a greater speed, would lose definition until it disappears. The speed of the bicycle reveals a new landscape to everyone. (Pileri 2015, 5)

Time, in the use of the bicycle, is a very important variable, in terms of perception and assimilation of space as narrated by Paolo Pileri, in terms of displacement: cycling often can be much faster than using the car.

Numerous cities around the world, for different reasons and with different approaches, are committed to improving slow and cycling mobility. This is the case of Amsterdam, a city that chose bicycles since 1973, from when there was an oil crisis and bicycle became the protagonist. For Netherlands, now, the bicycle is not only a means of transport but a cultural issue, a way of life. The city of Chicago with the *River Ride* is planning a 10 kilometers long floating cycle path to easily and safely cross the city linking the Horner area to Ping Tom. The *River Ride* aims to promote slow mobility and increase the number of urban cyclists in the city. Even in the East, the culture of slow mobility is developing, the Government of Singapore plans to revitalize bicycle mobility with the realization of 700 kilometers of cycling routes by 2030. In Italy, the city of Siracusa with “Siracusa city green” wins in 2017 the Urban Award.⁶ The merit of this project is the engagement of a cultural revolution through a complex sustainable mobility project that integrates bike sharing, carpooling, bike lanes, pedibus and electric buses. An in-depth territorial study and a needs analysis are the basics for establishing sustainable design solutions and interventions aimed at improving the quality of city life.⁷

6 – Italian Prize part of the Green Road Awards, a prize that aims to enhance all forms of sustainable tourism and Italian cyclopedonian paths to make them known to the general public. (www.igraw.bike)

7 – Many of the cities described above are case studies treated and detailed by Steve Fleming in the book *Cycle Space: Architecture and Urban Design in the Age of the Bicycle* published in 2012. In this book, Fleming dedicated a chapter to each city, associating it with a key word that summarizes its relationship with sweet mobility. For example, he uses the word “Practical” for Amsterdam, “Free” for Singapore, “Green” for Chicago and so on.



Bicycle: A new way of living the city

Now a real urban revolution is needed. Cycle paths can be a tool to involve and re-inhabit abandoned realities. To do so it is necessary to think of a well-founded strategy: identify places and make sure people approve them, creating a usable network. It is also necessary to have a better compatibility between the structure of urban centers and bicycles and cars. The theme of movement within urban spaces is essential because living in the city means moving inside it, reaching social spaces, working environments, schools, parks, museums, stations, supermarkets and so on.

The paths, the network of habitual or potential lines of movement through the urban complex, are the most potent means by which the whole can be ordered. The key lines should have some singular quality which marks them off from surrounding (channels) (...). These characters should be so applied as to give continuity to the path. (Lynch 1985, 96)

The qualities of Kevin Lynch are identified in a precise spatial quality, the presence of a function or activity along their development, the use of certain materials, the presence of vegetation or not, etc. The presence of attributes can be the pretext for developing a more complex lightweight infrastructure system. The bicycle is a strongly identifiable instrument and a symbol of a smart sustainable city. It is essential to make cycling a system with some continuity of paths and get a growing network related to sustainable mobility activities.

The use of bicycles cannot, however, become the only possibility for the cities of the nearest future. “The future of sustainable urban mobility is entrusted to a skillful mix of public transport systems on iron and road (with vehicles equipped with eco-friendly propulsion systems), pedestrian mobility and cycling mobility” (Bozzuto 2016, 28). It is necessary and interesting to develop an interdependence between different means of transport and different components: in urban space, mobility provides order and reconnection, green gives quality and regeneration to the environmental system. The presence of greenery can be the conductor that accompanies light infrastructures and helps them to fit into a heavily densified context.

The light infrastructures and the greenery are also elements that together can re-connect the city and the natural landscape, becoming a rural path in the middle of fields. Cyclotourism is becoming an important phenomenon in Italy and the sites of this activity are not just designed cycling paths, but also spontaneous, historical or agricultural paths. Cyclotourism was born as a form of travel for a short vacation, a slow way to discover the landscape in absolute

respect for nature. The basic premises for cyclists are a continuous, safe and visually pleasing road, with some services that follow along its development, such as bike shops, hostels, restaurants and a good deal of cultural heritage. As Ernest Hemingway wrote in the notes of the writing of one of his greatest and most famous novels, the *Old and the Sea* (1952), it is only by riding a bike that you learn the contours of a country better, because you have to sweat on the hills and go downhill in the descents. Only in this way you remember how they really are, while in the car you remain impressed only the highest hills, and you do not have a very accurate memory of the country you have crossed in the car as you have been cycling on it. It is therefore essential to imagine a wide-sighted city network that develops out of the city capillary throughout the territory to ensure its full fruition. This is not an unattainable condition, but an overview and a collective effort are needed to make it possible. The bicycle allows to really know the essence of a place.

The bicycle, for those who risk using it in the city for the first time, is the opportunity for an unprecedented experience: it allows re-evaluating distances and following routes that are impossible for public transport following fixed itineraries. Cycling does not impose changes, coincidences must not be expected. It almost secretly slips into another geography, absolutely and literally poetic, an occasion for immediate contact between places normally frequented separately, and which thus becomes a source of spatial metaphors, unexpected confrontations and short circuits that never cease to stimulate with the force of calf the revived curiosity of the passers. (Augé 2009, 40)

Cycling is always a new experience. It means to feel the space, the streets, the places, in a different way, with new eyes. The use of bicycle is also a mass cultural phenomenon:

On New Year's Eve 2011, tens thousands of Taiwanese have simultaneously taken their bicycles to set the world record for the largest number of mass-ride participants. A local newspaper calculates were 72,019; another counted 114,606. In both cases, it was the right record for the country hosting the Giant, the world's largest bicycle manufacturer. (Hamilton 2017, 176)

It is very common, especially in big cities, during evening hours, to clash with a swarm of cyclists, cyclists who participate in the critical mass,⁸ a gathering of bicycles that invades the streets and makes them their own

8 – Critical mass is a movement, a gathering of bicycles, usually a citizen, which provides collective rides along the streets of the city. it is a spontaneous event without formal organizational structure. The first critical mass was held in 1992 in California, in the city of San Francisco.

for a few minutes. A large group of cyclists can stop or divert car traffic for a few moments, and this is the lesson to be learned from critical masses: one alone cannot do anything, together you can fight, even if for a short while, the whole system. The bicycle is a phenomenon that unites people because it allows them to express themselves and use the bicycle in the way they prefer, to move, to do sports, to have fun, all in the respect of themselves and the world around us.

How can the bicycle transform the city (or how can the city transform itself for the bicycle)

Mobility is at the first place of smart city goals. The primary goal of sustainable mobility is the rapid, inexpensive, stress-free movement. Fundamental to this is the presence of efficient intermodal mobility, which also allows to load bicycles on buses and subway in their spaces.

What are the tools that can help the use of bicycles as a prevalent transportation within cities and their suburbs? The intervention modes are organized into different categories such as economic, social, cultural, political, planning or design initiatives.

To create a bicycle-sized city the design must be global and also a little dreamy. We have to come to the view that it is necessary to design radical, and non-fragmented interventions, to create a real cycling network. This network must be designed according to the needs of citizens and cyclists. People need the “development of flexible, adaptable, and resistant (social, physical and institutional), and can be both actively and proactively adapted to changing frameworks conditions” (Schiappacasse and Müller 2015, S14). Cyclists need safe paths to move freely. New bicycle paths must be designed in terms of quality, with the addition of green areas along most of the sections with the aim of improving human health and the whole cycling experience.

Furthermore, the nature of the place and the city is an important evaluation point for a reflection on the use of the bicycle. The conformation of the territory can incentivize or otherwise demotivate the daily use of the bicycle. Many cities have flat land, an example is the city of Amsterdam, built on a portion of artificially dried and drained land. The flat nature of the territory, together with the small size of the city, strongly encourages citizens to use the bicycle as the main means of transport because the movements with the creation of cycle lanes with their own road sections or separate from the road for cars safely, crossroads with priority areas for bicycles, with dedicated and well-marked cycling crossings are fast

and not really tiring. In cities such as Lisbon or San Francisco, where the slopes are significant and the use of the bicycle is strongly limited by morphology, it is easier to find alternative transport such as funicular networks, public lifts, and tramways on which to load the bicycles.

In some cities it is possible to rethink and remodel the historic center and not only in terms of pedestrians and cyclists in an almost natural way, in other cases where the presence of cars is overwhelming it is difficult to introduce space dedicated to the bicycle. In cases where it is necessary to take away space from car traffic, the choices to be made are sometimes very difficult. Is it possible to find a compromise between the request for bike accommodation and car needs? Surely, where space is limited and already heavily designed, it will be difficult to give portions of cities to cycle mobility, but with a good operation of – *size* and *sewing* – and redistribution of weights it will be possible to achieve the coexistence of every type of mobility desired.

A good portion of citizens is calling for changes to more environmentally friendly, cheaper and, above all, less time-consuming modes of transport. You do not need much space for cycling in the city, you can propose to reduce the width of the wider carriageways, thus reducing the speed of cars and facilitating the crossing of pedestrians. The space required for a cycle infrastructure can also be created without the road sections being reduced, going into interstitial spaces of the city, alongside the tram tracks along the green urban avenues.

To change the city, not only tangible, but also abstract interventions such as the modification of the highway code are needed: the introduction of – “contradictions” – for cyclists in one-way streets is an effective measure to encourage the use of the bicycle, regulated and safe. The cities giving space to cyclists increase urban quality and attractiveness. The cycle paths will gradually become a part of the city rules, around which sporting activities, dedicated services, pedestrian and cycling leisure sites will spontaneously arise. It is important to stimulate the creation of dedicated structures, real symbolic activities of the bicycle culture as it did in Calgary, Canada, with the Peace Bridge,⁹ an exclusively cycling crossing structure, or as

9 – The Peace Bridge is a cycle-pedestrian bridge born from the need to connect the Bow River area with Calgary center to ensure the transition to the growing number of people moving to the city for work. The path was designed by architect Santiago Calatrava and inaugurated in 2012. The new bridge is located on the south side of the river. The 126-meter long (413 feet) and 8-meter wide (26 feet) with a total height at 5.85 meters (19 feet) bridge structure is embedded as a sculptural, yet mathematically-derived element into a naturally landscaped surrounding and its sculptural appearance generates a striking contrast with the surrounding landscape (from <https://calatrava.com/projects/peace-bridge-calgary.html>).



the 8TALLET homes¹⁰ built in Copenhagen (2009), where people who live in them can ride bicycling just outside the doorstep through a continuous cycling ramp that runs along the gardens and the balconies of the buildings themselves. The culture of sustainable mobility must be an important part of city planning processes, not just in large-scale but also in small-scale. Bike design can become an engaging part of design, a creative and experimental section of design of open space and urban furnishings. Through the study of versatile and sustainable solutions, it will be possible to design real objects such as bicycle racks, staircases, benches dedicated to cyclists or concrete spaces such as parking areas and bike sharing stations.

10 – 8TALLET (the number 8) is the name of the family houses and community designed by Bjarke Ingels Group (BIG). The 8 House has two sloping green roofs with a height over 1700 m², which are strategically placed to reduce the urban heat island effect as well as to visually tie it back to the adjacent farmlands towards the south. The shape of the building allows for daylighting and natural ventilation for all units. In addition, rainwater is collected and repurposed through a storm water management system (from <http://www.big.dk/#projects-8>). The project won the prize at the World Architecture Festival for the Housing category in 2011. Around the complex it develops a ramp one kilometer long that curls around the building and connects it with the city.

The new utopian city of the bicycle feels the need to change according to its inhabitants, but not exclusively morphologically and formally. What must be radically modified is the cultural substrate. To induce a city to become a supporter of sustainable mobility and cycling mobility, it is necessary to cultivate, raise awareness, educate young people and at the same time provide them with all the tools necessary to send the message. Examples of good practice show bicycle access everywhere in the city, producing and distributing maps of bicycle paths, establishing or enhancing bike sharing and bicycle rental, providing resting areas and parking areas specially designed for cyclists. Bicycle use is increasingly a social phenomenon and communication plays a key role in promoting its development. Through information and social media sites it is possible to show all the bike-friendly initiatives and events planned by the city, it is possible to communicate the appointments of temporary cyclists or to plan mass-cycling with weekly schedule, in real time and in a totally accessible way.

Conclusion

To make our cities fit for pedestrians and bicycles, it is not needed a radical change in the urban structure but just an adaptation of it. Every city must try to understand its potential in terms of space, mobility and service offerings. The easiest and most immediate way is to try to learn from the virtuous cities, like the cities of northern Europe, Amsterdam and Copenhagen, but also american models like Portland and Chicago, trying to understand their best practices, studying their modification mechanisms and their urban strategies.

At national level, it would be possible to start from smaller cities, where management is easier, and then involve more developed urban centers. For some cities, the process of modification will be simpler, for others more difficult, but it is essential to plan a development based on medium-long term programs to ensure a gradual change and not a complete distortion of the way of enjoying the city. In order to be able to transform our cities safely and effectively, in terms of environmental, economic, social, mobility and health, a drastic change of mentality is needed. Is there a shift in mentality in our cities in favor of a mobility policy that respects the urban environment? For now, certainly not.

Mobility is a matter of mentality. A battle for a model of cities characterized by sustainable mobility requires large information campaigns for all citizens, from pedestrians to drivers and the improvement of the image of cyclists. "The process of identifying, conceptualizing, gathering support for and ultimately realizing urban renewal schemes while giving primacy at every stage to the bike rider needn't be to the exclusion of the non-cyclist" (Fleming 2016, 154). Because the creation of an open mentality to

cycling is essential, as Fleming said, even people who are not cyclists can become part of a common identity in favor of cycling.

For cities, it is necessary to let people know cycle facilities and arrangements for soft mobility planned or just carried out by the municipality, thus demonstrating the interest in ecology and the strong consideration of cyclists by those who govern the city. It is important to underline the economic interest that bicycle use represents for companies, from the production of bicycles themselves to the creation of new jobs for those who design, build and maintain efficient services related to cycle mobility. To promote the use of the bicycles and create a sensitive mentality, numerous initiatives can be organized; the arrangement of circuits and bike tours through the city highlights the possibility of experiencing the pleasure of riding a bike in your city.

Fundamental is that the new mentality is shared by everyone, from municipalities to citizens. The establishment of collaborations between public administrations, businesses, cyclists' associations and citizens can create a network of mass events to support the cycle mobility useful to make known the advantages of cycling and to involve everyone in the first person.

In the utopian city of the bicycle we will see “a flourishing of cycling along the networks of land or of waterways that precede the road network” (Fleming 2016, 149). This will only happen if we look to the future with new eyes, aware of the needs of the contemporary city and its citizens.