

Is bike-sharing system really beneficial to our city?

When we roam around the campus, we can always see a lot of blue-colored bikes lining up in a well-organized order near the street. Those bikes are called Hellobike, which is one of the most popular sharing bikes in China. Indeed, bike-sharing system is highly welcomed by our students in Nanjing University.

Another bike-sharing company – ofo bike, however, is going through a tough time now. There are fewer and fewer ofo bikes in our campus, with most of them broken deliberately by people and unable to ride. Three weeks ago, I asked to get my deposit on ofo back online, but I haven't got any reply from the company yet.

Recent news has shown that many bike-sharing companies are now facing serious financial problems, with some of them even bankrupt. The question of whether bike-sharing system is really beneficial to our city has been debated for a long period. For example, some authorities in China highly encourage citizens to ride shared bikes, since riding bikes instead of driving cars releases much less harmful articles and builds up our stamina. In their eyes, bike-sharing system promotes the trend of Eco-travel, which is in parallel with the philosophy of pushing for a green city. On the contrary, some journalists make strong criticisms on bike-sharing systems, for there are many bikes severely damaged by people on purpose, and the deposit for riding shared-bikes is a bit high and hard to refund. According to those foreign travelers, bike-sharing is just a waste of resources, not a benefit for citizens.

So, what can bike-sharing system really bring to us? I searched for some information in journal articles online to find the answer.

According to Wikipedia, a bicycle-sharing system is a service in which bicycles are made available for shared use to individuals on a short term basis for a price or free. The initial goal of bike sharing is to provide affordable access to bicycles for short-distance trip in urban area, as well as a way to deal with the “last mile” problem and connect users to public transit networks. Those bikes have a “dock” to lock them and people can use smart phone apps to find nearby available bikes and open docks.^[1] Bike-sharing technology has evolved over decades and has gained much popularity in China nowadays. Of the world's 15 biggest public bike share programs, 13 are in China. So it's plain to see that China is leading the head of bike-sharing system.^[1]

Though the primary goal of pushing for bike-sharing system is good, the economic impact of bike-sharing is still under debate at present. Much to my surprise, most of the scholars show negative attitudes towards the over-supply of shared bikes. First of all, since the operation of bike-sharing system needs public funding as a financial support, they think the use of public funding is not up to our expectations, and could be used more wisely in other aspects. For example, instead of developing shared bikes,

we can put the money into roads construction or other services that more residents use on a daily basis,^[2] or to improve infrastructure to accommodate the increasing number of bike journeys.^[3] What's more, they stated that those shared bikes have occupied what used to be car parking areas, causing inconvenience to citizens. For bikes which need a docking area to lock them, those areas may encroach upon the space available for on-street car parking.^[1] Even if many companies have transitioned into "dockless" programs, this effect still cannot be reduced. Because the increasing number of shared bikes can be parked everywhere, they still occupy these areas which can be used otherwise. As a result, it is hard for those companies to regulate their bikes. Most importantly, as more and more bikes are distributed into the city, the number of them wasted is increasing as well. So it's time to regulate booming bike share sector. The rocketing number of bikes has presented cities with a new set of challenges. But companies provide services for the sake of profit and are rarely motivated to spend money to provide public services. To deal with this situation, There should be policies or rules in place that define the responsibilities of companies, the government and users; whereby companies supply and rent bikes, the government provides standards and guidance, complementary infrastructure and policy safeguards, while people make use of the service.^[3] Nevertheless, although bike-sharing is criticized for its unwise distribution of resources, the benefit for reduction of traffic congestion is still appreciated.

Another aspect of the debate is about public health. In Western European cities, programs of public bicycle share are widely implemented. According to the study published in the *American Journal of Public Health*, they reached the conclusion by telephone surveys on three population-based samples of adults participated that this kind of programs indeed lead to greater likelihood of cycling among citizens, as well as improve people's health condition.^[4] As the number of bicycle riders increases, people drive their private cars less often, thus reducing the emission of carbon-dioxide and other harmful articles. Moreover, riding bicycle itself is a kind of physical activity which can make people stronger, as there are also some events related to bicycles in Olympics. However, others criticized it for there is no guarantee for lots of bike riders to stay safe on the road. In 2016, a 25-year-old woman riding a shared bike who died Friday morning following a crash involving a flatbed truck in Chicago's Avondale neighborhood is believed to be the first person killed while riding a bike-sharing bicycle in the United States. Experts and police officers insisted that this accident set alarm to us that we still have a lot to do to make our streets safe for everyone.^[5] Some even suggests that those shared bikes should be equipped with helmets or other kinds of safety devices to protect the riders. Bike shares always rely on riders to supply their own helmets, which will pose challenges and risks on riders.^[6]

In addition, there are also concerns about riders' personal privacy being invaded. Xianping Tao, professor of Department of Computer Science & Technology of NJU once said in his class: "There is no such good thing that allows you to use their bikes for free without any sacrifices." When we are ready to use shared bikes, the company

will ask the users to sign up for an agreement, which allows the company to collect the users' data including identity information, riding paths, riding distances and so on. Chances are that companies will analyze those data produced by users and find the personal health condition, characteristics and careers, in order to advertise products for them. What's more frightening is that those companies may do against the law and benefit from selling our personal information. Those activities are definitely against the primary goal of developing bike-sharing system.

As we can see from above, there still exist so many drawbacks for the operation of bike-sharing system. Does it mean that the goal of bike-sharing is impossible for us to realize, or should we give up the idea?

To me, the answer is definitely NO! Though the operation of bike-sharing is beyond our expectations, we cannot ignore the advantages bike-sharing offers to us. Also, some criticisms themselves are not convincing simply because they are based on incorrect assumptions. Personally, bike-sharing system is beneficial to our city and brings much convenience to our daily life.

First, developing bike-sharing is not a waste of public funding. Admittedly, improving infrastructure and constructing the roads are important for our city, but developing bike-sharing is equally important. Those criticisms above rely on a faulty assumption: that bike-sharing is not public good. They totally ignore the initial goal of bike-sharing. Shared bikes aim at creating convenience for travelling and reducing pollution. The cost to bike users is negligible, but the benefit for them is huge. To utilize public funding for wisely, there is a suggestion that bike-sharing be operated by non-profit organization. Since the primary goal of bike-sharing is not to gain profit from the users, operators should not hold the idea of making money from it, but try to advance their skills or create new ways to benefit their users truly. Moreover, strengthening supervision and making laws to regulate it is a help, too. The development of such a new thing is not always smooth. Governments are willing to make policies to guide the way. Laws need to be in place to protect users' privacy from being invaded as well as public properties from being broken deliberately. Thus, the bike-sharing industry can develop in a healthy way.

Second, it is a fact that bike-sharing indeed promotes a healthy way of travelling. It doesn't mean that driving cars is not good to our health and should not be recommended. All the reasoning and conclusions above are based on a certain situation – short-distance trip. That is to say, it is better to ride bikes instead of driving cars when you are going to a place nearby. As is mentioned above, riding bikes rather than driving release less harmful articles thus making our environment less polluted. It also has a positive effect for easing traffic congestions, which facilitates long-distances drivers, saving their time wasted on the road. What's more, bike-sharing can make a huge difference when connected to public traffic network. Since the bus stops are unable to cover all areas in town, people used to have

difficulty getting to their destinations just because of the “last mile” problem. This typical problem for short-distance travelling can be successfully addressed by bike-sharing. Additionally, I don’t agree with the criticisms that the roads are not safe enough for so many bike riders. We know that in China, we have lanes that are specially designed for cyclists and pedestrians. Those lanes are effective enough for protecting their health. However, in some developed countries like Japan, there are no lanes for cyclists, but seldom do accidents happen there. There are actually very few death accidents covered by social media compared with the number of bike-sharing users. As a result, as long as the quality of our citizens is good enough, bike-sharing is highly recommended for short-distance trip.

Finally, as a novel way of travelling, bike-sharing creates a new social pattern. It promotes the atmosphere of sharing and helping in our society, which has a significant meaning to our social culture. Through bike-sharing, we can see a new philosophy of “sharing economy”, which means that everyone can have access to those social materials with very little cost. We highly appreciated this philosophy for its positive effects on building a harmonious social atmosphere, and for its benefits for promoting good relationships among citizens. However, those positive influences are based on an assumption that the quality of our citizens is high enough. In fact, the quality of our citizens should be improved in order to catch up with the development of society. In that case, fewer and fewer bikes will be broken deliberately by people or parked everywhere to block the traffic, and fewer death accidents will happen as well. When the quality of our citizens is high enough, there will be no criticisms about shared bikes to be equipped with helmets, and we can all make the most of the social pattern of “sharing”. I believe that bike-sharing is more than just the product of the development of our economy and technology. It is the symbol of the progress of social civilization.

In conclusion, bike-sharing indeed benefits our society in all aspects. However, it still needs guides and improvements, since it was just developed recently and is still imperfect now. As a citizen, what I need to do is to treasure the social resources and make the best of bike-sharing system. We should view those criticisms as suggestions for improving bike-sharing system, making it more convenient for people. With the combined efforts from the society, bike-sharing will serve our society better, and a harmonious society will finally come.

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