Policy to promote bicycle use or bicycle to promote politicians? 
Bicycles in the imagery of urban mobility in Brazil

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During the last 15 years an increasing number of presidents, prime ministers, governors and mayors in developed and developing countries have been riding bicycles to promote a more sustainable and friendly form of urban mobility. We believe that these images also reveal and influence the image of contemporary urban mobility – the way in which people see what urban mobility is and how it should be. In this paper we discuss how the image of the bicycle has changed in Brazil and how this may influence an increase in its actual 1% bicycle modal share in big cities. We conclude that the importance of the bicycle in the image of urban mobility has been changing cyclically, and what seems to be a positive trend today might end up as being just an ephemeral positive image, with the risk of having no further practical consequences.

Keywords: bicycle; urban mobility; imagery; sociotechnical changes; Brazil

Introduction

In 1996 the World Bank declared that bicycles, like other non-motorized modes of transport, would bring economic, social and environmental benefits to the city, and should not be marginalized (World Bank, 1996). Other global institutions followed this line in subsequent years, and also offered funds and technical support for developing comprehensive transport plans that included bicycles (Economic Commission for Latin America and the Caribbean [ECLAC], 2000; European Commission, 2007; German Agency for Technical Cooperation [GTZ], 2010; Organisation for Economic Cooperation and Development [OECD], 2000; World Health Organization [WHO], 2011).

Since the advent of the Sustainable Transport Award in 2005, every award-winning city has included bicycle initiatives in its public transport plans – from London to Ahmedabad, from Seoul to Guayaquil (Institute for Transportation & Development Policy [ITDP], 2013). Dave Horton (2006) has discussed how activists have adopted bicycles as a sign of environmentalism, both in ‘green talks’ and also as translating their beliefs into behavior.

In this context, the use of bicycles has been linked to positive values such as social equity and an environmentally friendly and healthy mode of transport (see Fishman, Washington, & Haworth, 2013) – helping cities to promote themselves as leading players in a low-carbon-emissions society of the future (GTZ, 2010). Politicians† from presidents to mayors, regardless of ideological background, have been depicted riding their bicycles...
bicycles in a display of commitment to these positive values. The automotive industry has also decided to tie its image to the bicycle, including Audi™, Ferrari™, Volkswagen™, Smart™, Peugeot™, Land Rover™, BMW™, Mercedes Benz™, Porsche™, Maclaren™, Lexus™, and Ford™.

This introduction shows how the bicycle has become a symbol of sustainable urban transport. To understand the global importance achieved by the bicycle in the last decade or so, we have tried to trace how its image has changed during the last century, which contingent aspects are related to this change, and how they have influenced the image of the bicycle as a transportation mode. We begin with a brief comment on this change in the eyes of the Western world, based mainly on the work of Wiebe Bijker. We then focus our research on Brazil, the most urbanized of the developing countries, where politicians have also recently begun to embrace the bicycle as an alternative for stimulating a more sustainable urban mobility. We have tried to understand whether the positive image of the bicycle in the present may indeed represent a shift in the urban mobility pattern globally, or whether it is just a positive phase in a cyclical movement of the image of the bicycle, that has been changing over time, and may soon fade away.

Sociotechnical changes

The theory of the social construction of facts and artifacts may help us to understand how the image of the bicycle has contributed to changes in societies and cities during the past 150 years. For Wiebe Bijker (1995), technical artifacts are not simple objects, but rather an element of a sociotechnical ensemble, where technology and society mold each other reciprocally. Bicycles, like any other technological artifact, have different functions and symbolic values according to the way in which distinct social groups use and represent them – what Bijker (1995) calls interpretative flexibility. Bijker terms the convergence of diverse interpretations in the same meaning the ‘closure process’. Even for complex sociotechnical systems like cities, social meanings may stabilize, which Hommels (2000) calls urban obduracy – and the maintenance or change of which is highly dependent on dominant social groups (Bucchi, 2004).

Bijker took the bicycle as an example for developing the concept of a technological frame. He described how this artifact changed during its early history according to social behavior in Europe, and helped to transform it. At the very beginning, after the Napoleonic Wars, ‘the first proto-bicycles appeared as an amusement for (among others) decommissioned officers who were eager to impress young ladies’ (Norcliffe, 2001, p. 12). These proto-bicycles were propelled by the rider’s legs. Then the high front-wheel bicycle appeared. This vehicle was mainly used for displaying physical power among high-class sportsmen – bicycles were even pejoratively called ‘dandy horses’. Cycle races helped to develop the bicycle industry and were organized in several cities throughout the United States, France and England. As Andrew Ritchie says (1999, p. 491):

Early bicycle racing provides an excellent example of the creation of a new mass-spectator sport in the mid-19th century, during which there was an urge to both market and consume a novel spectacle. Bicycle makers were galvanized into activity; promoters likewise saw the opportunity to make money; good riders sought other riders to compete against, and mostly urban spectators (both men and women) had enough leisure time and disposable income to attend events.

At the end of the nineteenth century, the proponents of the bicycle ‘were loosely allied with the liberal faction, just as many contemporary advocates of the bicycle as an “earth-friendly machine” are inclined to green politics’ (Norcliffe, 2001, p. 15).
At the same time as the bicycle was attracting attention at sports fairs, however, its use as a mode of transport in cities was seen as an annoyance. Jim Fitzpatrick (1982, p. 54) reports that despite its widespread use in the early 1900s in Australia, ‘riders were snapped at by teamsters with their whips and dogs with their teeth; they countered with abusive language, court action and ammonia-filled squirt guns’. And in England

... every week in the Sunday newspaper the story of someone being knocked down and killed by a bicycle, and letters from readers saying cyclists ought not to be allowed to use the roads …’ (Thompson, as cited in Bijker, 1995, p. 41)

Then, many authors describe a mass use of bicycles in the late nineteenth century as the consequence of social and design changes: industries needed more workers, including women, who had to move longer distances over sprawling urban areas, cities needed to tackle problems of horse-powered transportation; and lower, hand-controlled brakes, chain-driven and same-sized wheels with detachable pneumatic tires made the bicycle safer, changing its design (Figure 1) and its role as a machine, once it became a widely accessible and comfortable mode of transport (Bijker, 1995; Herlihy, 2004; Norcliffe, 2001). This convergence of diverse interpretations resulting in the broad acceptance and the mass use of bicycles is an example of the ‘closure process’ discussed by Bijker (1995).

The use of the safety bicycle spread throughout Europe and the United States. Prices fell, a second-hand bicycle market emerged, street paving improved, and the vehicle accounted for 80% of modal share in Amsterdam by the 1950s, among other Dutch cities (Bruheze & Veraart, 1999). In the United States, 150,000 safety bicycles were sold in 1891 alone (Herlihy, 2004, p. 251). At the end of the nineteenth century, even the Queen of the United Kingdom was promoting the tricycle in public appearances.

One may imagine that the closure process is definitive, and not subject to change, due to its obduracy.

The relevant social groups have, in building up the technological frame, invested so much in the artifact that its meaning has become quite fixed, it cannot be changed easily, and it forms part of a hardened network of practices, theories and social institutions. (Bijker, 1995, p. 282)

However, around the 1950s, things changed again, to form a new hard sociotechnical ensemble, where cars were the sign of progress and the future for urban

Figure 1 ‘Boneshaker model’ (1880) on left side, and ‘safety bicycle’ (1886), on right side.- Source: Otto Lueger. Lexikon der gesamten Technik, 1904. https://commons.wikimedia.org
transportation. The abundance of oil, industry capacity to produce cars after World War II, sprawling cities and economic growth brought a boost to the automotive industry and transformed the urban landscape. The motorcar took over the streets until the oil crises of the 1970s. Bicycle activists then regained the streets in several cities, and European royalty once again rode bicycles to demonstrate that a necessary alternative already existed for facing the problems of oil prices and European dependence on unreliable reserves from the Middle East.

As Pucher and Buehler (2008) show, urban planning policies had an important role in promoting the use of bicycles in cities in the Netherlands, Germany and Denmark during the 1970s. However, Bruheze and Verraert (1999) state that the introduction of cars and their associated infrastructure in European cities became a standard in transport planning during the 1950s and 1970s, having a definitive role on the image and the use of bicycles. And they show that even the policies for promoting bicycles during and after the oil crises during the 1970s were not sufficient to bring about a return to the modal share of the 1950s. In only two decades, bicycle modal share in Amsterdam had declined to 25% of all trips.

The conflict between bicycles and cars is still alive, both in real cities and in the imagery of the city, as shown in the comparison of two advertisements, one from an automobile producer, and another from a bicycle producer, as cited by Cruz (2011). The General Motors™ advertisement links bicycles with negative socioeconomic values to encourage sales to college students by offering special discounts. The underlying message could be read as: ‘Because bicycles are children’s toys, and adults who ride them are not quite grown up, or worse, they wear lycra shorts’ (Vivanco, 2013, p. 1). As a reaction, Giant™ (the world’s largest bicycle producer) advertised the ordeal of being stuck in a car in traffic jams, and how gridlocks could be avoided by riding a bicycle. General Motors™ faced an unexpected negative reaction, expressed regrets, and withdrew its advertisements (Cruz, 2011).

In this paper, what we want to discuss is exactly how the imagery constructed around a certain technology influences its use and its social appropriation, and how meanings stabilized through history may indicate obduracy in incorporating the bicycle into contemporary urban mobility. To this end we take Brazil as an example of how the image of the bicycle has been changing in recent decades and is still poorly related to a comprehensive urban transportation policy. The same phenomenon of linking bicycles to toys or to sports machines is common in other countries (see Vivanco, 2013), and the Brazilian case might demonstrate how this image has been constructed and whether the recent ‘bicycle renaissance’ is really changing mobility policies towards bicycle-oriented cities, or if bicycles are only a new and necessary political sign of goodwill so that a city, as its politicians, can be accepted as environmentally friendly once linked with a new sustainability symbol.

**The image of the bicycle in Brazil**

According to the Empresa Brasileira de Planejamento de Transportes ([GEIPOT], 2001) both objective and subjective factors are responsible for discouraging bicycle use in Brazil. Objective factors range from federal government incentives to the car industry to lack of appropriate infrastructure and the weather. There are basically two subjective factors: a feeling of unsafe traffic, and the low social value attached to bicycles, as a vehicle for the lower classes. It is important to note that these are conclusions from a government agency, and they were issued when Brazil had less than 1% of bicycle
The perception of the bicycle as a viable and socially acceptable transportation mode is recent in Brazil. Until the 1940s all the bicycles sold in Brazil were imported. The printed publicity only translated some parts of the original advertising and retained the German and Swedish words, indicating their origin. Bicycles were relatively expensive, displayed only in specialized fairs, and potential buyers were the same as those who could afford a motorcycle, as can be seen from advertisements of the period (http://www.bicicletasantigas.com.br), where bicycles and motorcycles are put side by side harmoniously, produced and sold by the same industries. Nevertheless, these advertisements seem to indicate that the industry already saw motorization as an inevitable trend in urban mobility.

World War II presented difficulties in importing products and parts, and provided an unintentional impulse to the domestic industry. In 1945, Caloi™ opened its first factory in São Paulo (Caloi™, 2010). Monark™, which became the other important bicycle producer in Brazil, opened its factory in 1948 (Monark™, 2010a).

After the war, bicycle imports recommenced; but alongside the two main Brazilian producers many small factories opened in the country, such as Role, Beckstar, Bluebird, Batavium, Cacique, NB, Scatt, Hëlbia, Adaga, Vulcão, Rivera, Bérgamo, Zeus, Luxor and Apolo – however, they had to compete with the imported bicycles and almost all of them disappeared (Afornali, n.d.).

In the 1950s, the presence of the bicycle in cities was mainly related to sports. Photographs show crowds following bicycle competitions on the streets of Curitiba (Figure 2), and cyclists said that it was quite common to be treated as ‘sport stars’ (Fernandes, 2012). Such attention for this machine may be because at that time Curitiba had one bicycle for every 40 inhabitants (Instituto Brasileiro de Geografia e Estatística [IBGE], 1950).

Figure 2  First Prosdócimo championship, on 5 April 1952. Behind the bikes a car, from where Marumbi radio station made live transmission of the race.
Source: Adyr de Lima in Fernandes (2012).
Nonetheless, an impulse was also given to the automotive industry in Brazil during the 1950s – with direct and vigorous support from the federal government. Needless to say, the car became the symbol of success, linking its image to the country’s rapid economic growth and urbanization. Cars were taking over the streets of cities that had not been planned for them. But the image of the car was so powerful that the bicycle was increasingly seen as a second-class vehicle, and it was quite common to read anti-cyclist comments in the press:

… cyclists, at least most of them, have a death wish. They respect neither traffic regulations nor more powerful vehicles. Cyclists behave insanely with their machines, and the statistics show the result: millions of accidents annually, many of which are fatal. (Gazeta do Povo, 1962 as cited in Fernandes & Santos, 2010, p. 124)
In 1969, 337,800 bicycles were produced in Brazil, for a population of 80 million people (GEIPOT, 1976). However, the use of bicycle as a mode of transportation was decreasing. As an example, in a survey conducted by the Institute of Research and Planning of Curitiba [IPPUC] in 1978, only 14% of the bicycle owners used them for commuting (IPPUC, 1978, p. 6).

In 1976, GEIPOT launched the document ‘Planning cycle infrastructure: A politics for the bicycles’. On its introduction, the federal agency stated that:

Historically, the actions of the Brazilian government regarding non-motorized two wheel vehicles could be labeled ‘laissez-faire’.(GEIPOT, 1976, p. 10)

GEIPOT accepted that this lack of clear and proactive policies was partially responsible for the decrease in the bicycle modal share. Cars also were getting more passengers due to ‘technological progress, land use patterns and economic growth’ (GEIPOT, 1976, p. 10). The intention of GEIPOT (1976, p. 6) was to take a ‘first step in order to support municipal and states administration’ in promoting non-motorized transportation, ‘minded to save energy and make urban life more attractive’.

Late in the 1970s, despite the fact that bicycles were still considered a most needed asset for the working class, as shown by the Brazilian Census (Alcorta, n.d.), their low income did not produce a dynamic market. Producers began to launch more models targeted at rich children and to promote bicycles mostly as vehicles for leisure and sports activities. Related to that, Afornali (n.d.) remembers a famous powdered chocolate advertisement of the period by NestléTM that offered bicycle coupons in the tin.

During the 1970s and 1980s, 95% of the bicycles sold in Brazil were produced by just two companies, CaloiTM and MonarkTM (Alcorta and Afornali, n.d.). The image of the

| Year | Producer/product                      | Suggested use         | Target              |
|------|--------------------------------------|-----------------------|---------------------|
| 1973 | Caloi institutional                   | Leisure/utilitarian   | Adult/children      |
| 1973 | Caloi 10                              | Leisure/sport         | Adult               |
| 1974 | Caloi Berlineta SB                    | Leisure               | Children            |
| 1976 | Monark institutional                  | Leisure               | Adult               |
| 1978 | Caloi barra forte (workers’ model)    | Leisure               | Adult/child         |
| 1978 | Monark barra circular (workers’ model)| Leisure               | Adult               |
| 1978 | Caloi arco duplo                      | Utilitarian/leisure   | Adult/child         |
| 1979 | Caloi c3                              | Leisure               | Children/child      |
| 1979 | Caloi institutional                   | Leisure               | Children            |
| 1979 | Caloi Ceci                           | Leisure               | Adult/female        |
| 1980 | Caloi Ceci                           | Leisure               | Adult/female        |
| 1980 | Caloi Cecizinha                       | Leisure               | Children/female     |
| 1980 | Caloi barra forte (workers’ model)    | Leisure               | Adult/male          |
| 1982 | Caloi cross                           | Sport                 | Children/female     |
| 1983 | Caloi cross extra                     | Sport                 | Children            |
| 1987 | Caloi cross                           | Sport                 | Children/child      |
| 1987 | Monark BMX                            | Leisure/sport         | Children/child      |
| 1985 | Caloi cruiser                         | Leisure               | Adult               |
| 1988 | Monark barra circular (workers’ model)| Leisure               | Adult/child         |
| 2009 | Caloi cross                           | Leisure               | Children/child      |
| 2010 | Caloi institutional                   | Utilitarian           | Adult               |
| 2011 | Caloi dobrável (foldable)             | Utilitarian           | Adult               |

Source: Authors, based on advertisement material available at www.youtube.com
bicycle as a children’s product was already embedded into the image of mobility in Brazil. Greeting the automotive industry for the 10 years’ activity in the country, Esso (as Exxon Mobil is named in Brazil) published an advertisement (Esso, as cited in Quatro Rodas, 1966, p.37) in a auto specialist magazine, depicting a boy riding a bicycle, which says:

It was 10 years ago. Today, he is certainly a man with his own car. Or a driver with his truck. When the automobile industry started here he only had a bicycle; but it has expanded and now he may have his own car – just as now there are thousands of trucks and buses that the country needs.

Television was also acquiring a stronger presence in the country, and after 1973 a color TV was a must. But only the middle and upper classes could afford one. Analyzing how bicycles were advertised on TV may indicate who the industry was targeting and with which kind of product, as shown in Table 1.

The image of the bicycle related to sports and leisure activities gained more and more space from the 1970s, targeting mostly middle- and upper-class children, as we can depict from models, manufacturer catalogs and advertisements of the period (http://www.bicicletasantigas.com.br). In the late 1970s MonarkTM started developing special models for what was called bicicross – like the BMX model, ‘the motocross bicycle by Monark’ (MonarkTM, 2010b).

Many of the bicycles produced by MonarkTM during the 1970s looked like motorcycles for children, in a kind of suicidal long-term marketing approach, for when children became adults they would prefer to ride motorcycles rather than adult bicycles – motorcycles which MonarkTM did not produce. Tigrão (big tiger) emulated the Chopper motorcycle and was a very successful model among children and teenagers (MonarkTM, 2010b).

In 1982 Steven Spielberg’s E.T. became an international blockbuster. In the movie, a 10-year-old boy rides a cyclo-cross bicycle on adventures with his extra-terrestrial friend. In the same year the two major Brazilian bicycle producers launched their own cyclo-cross models, exploiting the market opportunity created by the movie. The classic image of a boy riding his cyclo-cross with a full moon in the background inspired a CaloiTM television advertisement (CaloiTM, 1982). and extra-terrestrial elements were also incorporated into a Monark advertisement.

From 1980 to 2000, virtually all bicycle advertising was shown on TV (Table 1). In 1991, 2.5 million bicycles were sold in Brazil (Associação Brasileira da Indústria, Comércio, Importação e Exportação de Bicicletas, Peças e Acessórios [ABRADIBI], n.d.) for a population of 145 million people. According to ABRADIBI, sales in 2001 reached 5 million bicycles, and in 2011 6 million (ABRADIBI, n.d.), for a population of 190 million; and according to the Associação Brasileira dos Fabricantes de Motocicletas, Ciclomotores, Motonetas, Bicicletas e Similares [ABRACICLO], production reached a peak of 5.3 million in 2007, decreasing yearly to reach 4.6 in 2011 (ABRACICLO, n.d.).

Still, the modal split in Brazil is concentrated in public and non-motorized modes, with trips on foot accounting for 37% of the daily trips, public transport for 28%, and bicycles for only 3.4%. However, there is a huge difference related to the size of the city. The smaller the city, the higher the use of bicycles: in cities with 60,000 to 100,000 inhabitants, 13% of the trips are made on bicycles, decreasing to 1% in cities with more than 1 million inhabitants (Associação Nacional de Transportes Públicos [ANTP], 2012).
Whereas bicycle sales and use have stagnated, car sales have skyrocketed. From 1980 to 2000, the motorization rate in Brazil grew from 5.8 cars per 100 inhabitants to 11.7 cars per 100 inhabitants (Departamento Nacional de Trânsito [DENATRAN], 2012). The rate from 2000 to 2010 grew even faster – reaching 22.2 cars per 100 inhabitants (DENATRAN, 2012). This was partly due to macroeconomic aspects (controlled inflation and economic growth), but was also due to direct federal government support to the motor industry, reducing sales taxes and keeping the oil price artificially low in comparison to the international market.

In this scenario, on the one hand the federal and municipal governments are promoting the bicycle, and on the other hand, bicycle activism movements have become stronger during the past five years. Throughout the country, state governors and mayors can be seen riding bicycles and promising to endorse bicycle initiatives as a way of promoting a more inhabitable city. In 2004 the Ministry of Cities launched a national program called ‘Bicycle Brazil’, for now restricted to general intentions (Ministério das Cidades, n.d.). As da Silva (2012), architect of the same ministry, has noted, from 2004 to 2011, the public federal bank responsible for financing infrastructure for bicycles invested less than US$3 million, an amount that would make possible the construction of 30 km of bicycle paths – whereas 3000 km of roadways were funded by the federal government. And despite the low budget, only a few municipalities have presented eligible projects to access this fund.

It is true that some important cities have been investing in bicycle projects recently. However, if we consider the programs developed in some of these cities, we might wonder whether they will really be effective. Rio de Janeiro, which will host the 2016 Olympic Games, launched a bike-sharing program called Samba in 2011, in a joint venture between the City Council and a private bank. It has now 600 bicycles and 200 km of bike routes (mainly bike lanes). Not surprisingly, though, most of the 60 bike stations are located along the famous beaches of Ipanema, Copacabana, and the Rodrigo de Freitas lagoon – rich neighborhoods and tourist areas.

São Paulo has been investing in educational projects for promoting the use of bicycles in town. The main project, launched in 2009 in a joint venture with another private bank, is the establishment of bicycle lanes for leisure. The circuit is now more than 120 km long and used by more than 100,000 people each week, but it is still only open on Sundays. After the general street protests that occurred in Brazil in June 2013, triggered by the high cost and low quality of public transport, the Municipality of São Paulo announced a further 310 km of bike routes, which are actually signaled lanes shared with cars. Immediately cyclists criticized the initiative, pointing out that most of these routes were planned to be created in rich neighborhoods served by the bike-share program funded by a private bank (Correa, 2013). In both cases, Rio de Janeiro and São Paulo, cyclists say that, as advertising is strictly controlled in these touristic and rich areas, bicycle infrastructure became one of the only available spaces for street publicity – therefore, these bike-sharing initiatives are only by-products of the advertisement industry. This argument is reinforced by the fact that a public bid to expand Rio de Janeiro’s bike-sharing program beyond the touristic zone opened and cancelled in 2013 for lack of interest, as its economic model was linked to publicity spaces.

These two examples show that even when city officials act to promote the bicycle their projects still link this vehicle to sports and leisure activities, even regarding them as a by-product of other political interests – and not really as a mode of transport that should be promoted for its environmental, economic and social contributions to cities.
Conclusion

During the last 150 years the bicycle has sometimes been considered as a solution for urban mobility and sometimes as an annoyance. Echoing Bijker (1995), it is possible to understand the changing role of bicycles in urban mobility when we consider them as an element of a sociotechnical ensemble, where ‘technical’ aspects are embedded in social, economic, political, and cultural aspects. As we have noted, the use of bicycles in cities has been varying, responding to multiple-level factors – from the city to the global level factors and policies.

Brazil has never had a comprehensive bicycle plan at national level. Furthermore, after the 1970s, the government started stimulating the automotive industry and used road design as a way of planning cities. Investments in urban infrastructure have been following the growth of the car fleet. According to the rare federal policies related to bicycles, the government stated that until 1978 no specific formal transportation planning for bicycles had been made. This is reflected by the small size of the Brazilian bicycle market. In an environment of discredit and lack of support, the bicycle industry reacted and started promoting the bicycle to children and teenagers, and incorporated motorcycle features into its design, to show that bicycles were only the first step on the way to real vehicle ownership.

Bijker (1995, p. 146) notes that ‘attributions of meaning are social processes and, as such, are bound by constraints. Previous meaning attributions limit the flexibility of later ones, structures are built up, artifacts stabilize, and ensembles become more obdurate’. Following the imagery of the bicycle in Brazil we may conclude that during the last four decades a closure in the sociotechnical ensemble of urban mobility occurred, with bicycles gradually losing relevance as a mode of transportation.

However, closure is not definitive, as the cases of Amsterdam and Copenhagen have shown – with the level of bicycle use changing dramatically over the last century, partially due to a global environment favoring one or other mode of transportation, partially due to national and local policies favoring cycling. We have also seen, based on Bruheze and Veraart (1999) and Pucher and Buehler (2008) that transportation policy promoting bicycle use is an essential element for disrupting sociotechnical obduracies.

Therefore, the historical lack of national policies for promoting the use of the bicycle in Brazil has become a barrier to increasing bicycle modal share. It is also possible to conclude that Brazilian transport and urban planners, as part of the sociotechnical ensemble, have neglected the bicycle as a transportation mode, presenting only erratic and short-term proposals. As Bijker stated (1995, p. 281), ‘without an understanding of the interpretative flexibility of sociotechnical ensembles, the analysis of technology and society is bound to reproduce only the stabilized meanings of technical artifacts and will miss many opportunities for intervention’.

However, if we consider the history of the bicycle imagery in Brazil, it remains to be seen whether recent attention is going to have any significant effect on increasing the use of bicycles and improving bicycle policies, or if politicians are just replicating a contemporary mindset that uses bicycles as a sign in the imagery of more sustainable and liveable cities, which may be insufficient to change transportation trends, as well as the future of the Brazilian urban mobility.

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Notes
1. A search for politicians + bicycle on Google images shows politicians promoting and riding bicycles, including the Mayor of Copenhagen and the US President (1993), the Mayor of London and the Governor of California (2011), the Mayor of Paris (2008), the Governor of Rio de Janeiro (2008), the Mayor of São Paulo (2012), the Mayor of Bogotá (2010), the Mayor of New York (2012), the Mayor of Curitiba (2013).
2. The quotation continues: ‘… and readers recommended “Bicyclists ought to have roads to themselves, like railway trains”…’ (Thompson as cited in Bijker, 1995, p. 41). This is interestingly contemporary, but beyond the scope of this paper.
3. This was published in a newspaper in Curitiba, at that time a city with fewer than 400,000 inhabitants.
4. The map of the bike stations can be found at http://www.movesamba.com.br/bikerio/

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