

SOCIAL INNOVATION: EXPLORING AN ALTERNATIVE FOR PUBLIC TRANSPORTATION IN SÃO PAULO

NELSON ROBERTO FURQUIM
UNIVERSIDADE PRESBITERIANA MACKENZIE (MACKENZIE)
nrfurquim@usp.br

Introdução

During the past decades, globalization has promoted a constant innovation process by the companies. When it comes to discussions about competitiveness and economic development, innovation is a mandatory subject. It is an expanded concept, which involves market and organizational aspects, even though most of the approaches refer to technological, process and product innovation.

Problema de Pesquisa e Objetivo

Which benefits have the bicycle lanes brought to the public transportation system in the city of São Paulo? Taking into account social actors' movements to innovate searching problems solutions, and the appearance of another kind of economy supported by social entrepreneurship bringing benefits to the whole society, the objective of this study was to explore the population perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo.

Fundamentação Teórica

Public administration plays a significant role in boosting innovation in economies, promoting the creation of public value to meet society challenges (Matei, Savulescu, & Antonovici, 2015).

In developed countries, innovative capabilities refer not only to investments in new technologies for products or processes; they are also aligned with broader knowledge availability (Maciel, 2005), which allows technological diversity and evolution to be strongly tied up to social needs (Baumgarten, 2008).

Metodologia

The study involved the qualitative and quantitative methodology of the Discourse of the Collective Subject (DCS). The author conducted the survey with a convenience, non-probabilistic sample of 73 economic actors (young adults, adults and elderly people, both genders) in the city of São Paulo, during October and November 2015, using a structured questionnaire with open questions. Answers were recorded using a smartphone; then transcribed and uploaded to software Qualiquantisoft.

Análise dos Resultados

All the controversy about the availability of bicycle lanes in São Paulo does not only stand for a struggle about the logistics of everyday life in the city. Most of the respondents indicated a positive perception about the bicycle lanes, perceived as a cheaper and more sustainable alternative for moving around the city. They believe it is a local government decision that will benefit citizens and expect more investment for future expansions.

Conclusão

With most positive perception by the population, it refers to the value residents attribute to public space and the legitimacy they grant to people who wish to occupy that space with something other than cars. Lack of space, fuel crisis, environmental issues and other economic aspects observed in daily life in São Paulo become catalysts for several actions, which stimulate social innovation such as the offer of bicycle lanes and present a potential to social transformation.

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SOCIAL INNOVATION: EXPLORING AN ALTERNATIVE FOR PUBLIC TRANSPORTATION IN SÃO PAULO

ABSTRACT

During the past decades, globalization has promoted a constant innovation process by the companies. When it comes to discussions about competitiveness and economic development, innovation is a mandatory subject. It is an expanded concept, which involves market and organizational aspects, even though most of the approaches refer to technological, process and product innovation. Which benefits have the bicycle lanes brought to the public transportation system in the city of São Paulo? Taking into account social actors' movements to innovate searching problems solutions, and the appearance of another kind of economy supported by social entrepreneurship bringing benefits to the whole society, the objective of this study was to explore the population perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo. The study involved the qualitative and quantitative methodology of the Discourse of the Collective Subject (DCS). The author conducted the survey with a convenience, non-probabilistic sample of 73 economic actors (young adults, adults and elderly people, both genders) in the city of São Paulo, during October and November 2015, using a structured questionnaire with open questions. Answers were recorded using a smartphone; then transcribed and uploaded to software *Qualiquantisoft*. Most of the respondents indicated a positive perception about the bicycle lanes, perceived as a cheaper and more sustainable alternative for moving around the city. They believe it is a local government decision that will benefit citizens and expect more investment for future expansions. With most positive perception by the population, it refers to the value residents attribute to public space and the legitimacy they grant to people who wish to occupy that space with something other than cars. Lack of space, fuel crisis, environmental issues and other economic aspects observed in daily life in São Paulo become catalysts for several actions, which stimulate social innovation such as the offer of bicycle lanes and present a potential to social transformation.

KEYWORDS

Social innovation. Bicycle lanes. Public transportation.

1 INTRODUCTION

During the past decades, globalization has promoted a constant innovation process by the companies. When it comes to discussions about competitiveness and economic development, innovation is a mandatory subject. It is an expanded concept, which involves market and organizational aspects, even though most of the approaches refer to technological, process and product innovation (Bignetti, 2011).

On the other hand, according to Neto and Abreu (2015), established standards of thinking and acting have been impacted by a more intensive involvement of different social actors to face uncertainties and deep social problems.

Under that perspective, when knowledge is applied to social needs by means of participation and cooperation of all involved actors, it may lead to creating new and sustainable solutions for social groups, communities and for the whole society (Bignetti, 2011).

Simultaneously, in the process of searching for problem solutions through sustainable and collective postures, innovation with an economic approach may arise (Neto & Abreu, 2015).

Even under an empirical perspective, problems solutions have been always tied up to innovation, (Gollo, 2006; Zawislak, 1995). However, when it comes to changes generated by

social innovation, the searched solutions overcome the ones related to only technical or simpler problems.

Studies point out that consumption is comprised of routines and habits, and that consumers hardly ever reflect upon them during their everyday life. Those routines and habits are embedded in different social contexts, and rather stable networks and practices that are part of the consumers' conduct support them (Schafer & Jaeger-Erben, 2012; Shove & Warde, 2002; Spaargaren & Van Vliet, 2000).

Many attempts have been made to influence knowledge or attitudes of consumers, but they have not led to important changes in current trends of consumption patterns (Jackson, 2005; Fuchs & Lorek, 2005). An aspect that may be pointed out from that perspective is the strategy of observing how sustainable consumption practices are within a certain society, as a part of innovative activities and initiatives of the consumers.

Social innovation has been defined in different approaches, either in theory or in practice (Howaldt & Schwarz, 2011; Klein, 2013), and has been applied to a variety of initiatives, organizational settings and innovative services. It may be also referred to as collaborative consumption, sharing economy or communing (Botsman & Rogers, 2010; Heinrichs & Grunenberg, 2012; Jackson, 2009; Ostrom, 2011).

Considering that social relations and experiences of those in need are strongly connected to social innovation, it is, then, expected they may activate and motivate consumers and citizens more efficiently (Moulaert, Macallum, Mehmood, & Hamdouch, 2013a, b). In that context, it must be highlighted that social networks play an important role for dissemination of social innovation, which also promotes high levels of acceptance (McMichael & Shipworth, 2013).

Lately in Brazil, there has been several supporting initiatives to assist poor communities, but they are still very limited due to the severity of the problems. Some examples of those supporting initiatives are voluntary actions, social action groups, solidarity economy, and non-governmental organizations. Furthermore, programs to face illiteracy, famine, drugs and chronic diseases take place at the same time social movements try to minimize gaps left by governmental actions (Bignetti, 2011).

As social economy moves as intensively as the global economy, and considering that the established governmental structure and policies are unable to eliminate and solve current problems (Murray, Caulier-Grice, & Mulgan, 2010), social innovation becomes, then, a way of searching feasible alternatives for the future of the human society (Bignetti, 2011).

Some of the world's most pressing problems have been solved by social innovations, and in the process of creating solutions for those problems, it has, as well, deeply changed beliefs, basic practices, resources, and social power structures. Social innovation provides an opportunity to step back from narrow ways of thinking about social enterprises, business engagement, and philanthropy. On the contrary, it recognizes the interconnection of various factors and stakeholders (Urama & Acheampong, 2013).

Societies have been deeply affected as economies grow and evolve, which may lead to changes in urban spaces and cities, in attempts to adapt to those changes. When it comes to trying to understand the dynamics of the cities, the combinations and mixtures of use of space and the diversity promoted by citizens' different tastes, skills and needs become significant study subjects (Jacobs, 2011).

Taking into account social actors' movements to innovate searching problems solutions, and the appearance of another kind of economy supported by social entrepreneurship, bringing benefits to the whole society, the research problem considered for this study was to identify which benefits have the bicycle lanes brought to the public transportation system in the city of São Paulo. The objective of this study was to explore the population perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo.

2 THEORETICAL FRAMEWORK

For contemporary societies, knowledge plays a strategic role promoting development challenges such as processes of social changes. At the same time that new alternatives of production and society changes may arise; the production of information and knowledge and their diffusion become indispensable, what may contribute to decrease social inequality. (Baumgarten, 2008).

Public administration plays a significant role in boosting innovation in economies, as well as triggering and searching contributions to enhance the creation of public value and to meet society challenges (Matei, Savulescu, & Antonovici, 2015).

In developed countries, innovative capabilities refer not only to investments in new technologies for products or processes; they are also aligned with broader knowledge availability (Maciel, 2005), which allows technological diversity and evolution to be strongly tied up to social needs (Baumgarten, 2008).

As a consequence to that, social innovation may be understood as measures that can be taken by ordinary people (Baker & Mehmood, 2015), and that approach has moved from previously established emphasis in organizational and technological terms (Hillier, Moulaert & Nussbaumer, 2004), to the social impact of innovation processes.

Baker and Mehmood (2015) assert that that inner functionality of social innovation occurs at different levels in different societies. The first level is the satisfaction of material and non-material human needs, taking into account that meeting the needs such as deprivation, exploitation, or other crisis mechanisms is a significant driver of social innovation. Those authors still mention that the second level of social innovation refers to the impact caused by social relations on the relationship among individuals themselves and among social groups.

In addition, the third level refers to the establishment of a link between the first and second levels, and it is associated to empowerment, considering that initiatives taken at the first and second levels would lead to positive macro levels changes within a certain society.

In that sense, crisis becomes as a driver of social innovation, and the search of responses may lead to the empowerment of local groups (Gerometta, Häussermann & Longo, 2005). However, there are different crisis scopes, as far as time, form, or intensity are concerned (Folke *et al.*, 2010).

To the extent that social innovation presents a temporal dimension, it may be created, adopted and diffused within a certain period, and its mechanisms should be aligned with the evolution of societies (Phills, Deiglmeier & Miller, 2008). Furthermore, it also presents a spatial dimension, taking into account its roots in place based contexts and needs.

Consequently, the spatial impact of a crisis becomes a catalyst for action, for it is urgent and immediate, and it stimulates social innovation for collective action at a specific place, leading to societal changes (Chapin *et al.*, 2009). Under that perspective, social innovation presents a potential for social transformation, due to the impact it causes in different contexts: social, economic and political.

Because of that, marginalized groups would benefit from the creation of community identities and social and political capabilities (Moulaert, Martinelli, González & Swyngedouw, 2007). Thus, social innovation may lead to changes in the role of civil society and in its relationship with the State.

In fact, social innovation is not a new concept. The terminology “social” in social innovation refers to social phenomena and social practices Jaeger-Erben, Ruckert-John & Schafer, 2015). Its importance in creating social order is reinforced by its value in promoting structural changes in society (Schumpeter, 2003).

Schatzki (1996) mentions that social practices are basically described as ways of doing and saying, the so called performances, which may be facilitated by and connect at least three different elements: (1) tools, technologies, materials; (2) affective and motivational elements due to various values, norms and meanings; (3) competences and know-how.

Under that perspective, social actors are carriers of social practices, who are able to continuously change and rearrange them by means of performances (Giddens, 1984).

Therefore, social innovation defined as “innovation of social practice” focuses on differentiated processes of change, moving away from ordinary changes of social practice (John, 2013). Consequently, social innovation becomes an alternative practice or new variation of practices, strongly different from previously established routines.

However, Petittlerc (2003) states that social changes are not restricted only to the relationship among actors and structures. Social interactions, organizations, public institutions and social movements are based in autonomy and dependence one to another, and each one of them establishes the social system movement according to its own logic.

Neto and Abreu (2015) describe that social innovation may be favored by several elements, with various interests, cultures, values and identities, which could be stressed differently during the innovation process, and that might lead to a collective learning.

On the other hand, as Bignetti (2011) asserts it, there is no incompatibility between technological and social innovation, though technological innovation aims at economic results and profits and social innovation refers to social matters. Nevertheless, some different aspects between them must be pointed out.

First of all, there is the value issue, considering that while technological innovation deals with value appropriation, social innovation is related to the creation of value (Mizik & Jacobson, 2003; Santos, 2009), dealing with social groups and communities interests. In fact, social innovation comes up as a response to a non-satisfactory social situation, and it aims at individuals and communities’ welfare, solving problems and needs such as health, education, work, leisure, transportation and tourism (Cloutier, 2003).

As far as strategies are concerned, Santos (2009) argues that while through technological innovation there is a search for competitive advantages, when it comes to social innovation, the objective is to co-operate to solve social issues. It is then required a strong partnership among the involved actors to obtain long lasting social transformation, standing for changes in the relationships and social conditions.

According to Chesbrough (2006), either open or closed technological innovation are deeply related to the organization itself, with high investments in research and development. They aim at creating radical innovations in products, services and processes, which may lead to market differentiation strategies. On the other hand, social innovation is closely related to community actions, starting with limited local efforts and resources, and may affect society as a whole (Goldsmith, 2010).

Cloutier (2003) highlights that another distinction between technological and social innovation is concerned to the innovation process. Technological innovation is an inner process, developed through defined sequential steps, established and controlled by means of specific management tools.

When it comes to social innovation, its process is developed with the participation of the community actors during the whole time of the project. Its birth, development and application are closely related and they happen with the co-operation of all the involved actors. It becomes, then, a collective learning process, based upon the potential of individuals and groups, who search the needed capabilities to accomplish social transformations, leading to new social relationships and structures.

Knowledge diffusion is another major difference between technological and social innovation (Cloutier, 2003). Several mechanisms are established to avoid an idea or a

technology to be copied by the competitors. As far as social innovation is concerned, diffusion mechanisms may promote the replication and expansion of their results to other communities, and it is a regular practice to extrapolate experiences from one community to another.

Despite the differences between technological and social innovation, they are not two exclusive groups, with many technological innovations presenting a social approach (Bignetti, 2011). That brings the attention to the discussion about the outcome of social innovation, especially considering how it may lead to social changes at all levels within a certain economy. Particularly related to this study is the discussion about the effects of a social innovation, the availability of bicycle lanes, on the public transportation system in the city of São Paulo, Brazil.

3 METHODOLOGY

The reference methodology adopted for this study was the Social Representation Theory (SRT). It is a kind of knowledge socially developed and shared, and it allows the identification of a reality commonly perceived by a certain social group (Jodelet, 2001). SRT also deals with the product of mental activity, through which individuals or groups of individuals reconstitute the reality they are exposed to and to which they establish a certain meaning (Sá, 1998; Jodelet, 2001).

Social representations are present in social practices, cultures and communication processes, and they are continuously dynamic (Sá, 1998). Their basic study resources are the opinions verbalization, the attitudes and the individual and collective judgments as their basic study resources, which lead to a consensus outlook on reality (Jodelet, 2001).

This study is based upon the qualitative and quantitative methodology of the Discourse of the Collective Subject (DCS), which allows the identification of common sense opinions about a certain subject or a phenomenon, obtained from the answers or comments of a group of individuals.

When a survey is carried out with the purpose of establishing the DCS, the opinion of each one of the respondents is obtained using structured and semi-structured questionnaires with open questions (Lefèvre, Lefèvre, Scandar, & Yassumaro, 2004), which will allow the establishment of a discursive testimony (Schoeps *et al.*, 2014). That procedure will make it possible the recovery of the thoughts, values, and beliefs individually internalized via discourses (Lefèvre & Lefèvre, 2000).

Based upon SRT and its basic sociological assumptions, the DCS is essentially put together by analyzing each one of the collected statements about a specific subject (Lefèvre, Crestana & Cornetta, 2003). The DCS allows the social representations to become clearer and more focused, besides making it possible for the identification of a certain social group as the author and issuer of common sense speeches (Teixeira & Lefèvre, 2001).

The methodology of DCS puts together as much synthesis speeches as necessary to express a specific thought or a social representation by organizing all the statements generated on the empirical social survey.

For this specific study the software *Qualiquantisoft* was used to process the respondents' statements, and their analysis involved selecting their respective key expressions (KE), and identifying the central ideas (CI) of each key expression, which are the basic elements to build up the DCS and building up the DCS (Lefèvre & Lefèvre, 2005, p.12).

A CI is a word or a language expression used to describe, synthetically and the most accurately possible, what each analyzed statement presents as a main sense or subject (Lefèvre & Lefèvre, 2003a). Those authors also mention that KE are parts or sections of each one of the obtained statements, with an emphasized meaning, pointing out the essence of the speech. The combination of similar key expressions and central ideas in a "discourse synthesis" comprises the DSC (Lefèvre & Lefèvre, 2000; 2003a; 2010).

For this study survey, the following group of economical actors was defined: youngsters older than eighteen years old, adults and elderly people, both genders. It was defined a convenience, non-probabilistic sample, with spontaneous adhesion.

The interviews were carried out by the author of the study, at Avenida Paulista, a main avenue in a high middle class neighborhood in the city of São Paulo, Brazil, during October and November 2015. For that it was used a structured questionnaire with open questions.

The answers of all considered respondents were recorded using a smartphone, and then they were transcribed and uploaded to software Qualiquantisoft.

Answers to a specific question concerning the respondents' perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo were analyzed for this article.

4 RESULTS

This study was based upon a sample of 73 respondents, belonging to the different categories of selected actors, all of them living in the city of São Paulo, Brazil. From the respondents, 80.0% were men; 47.0% were professionals, and 97.0% either were at the university or were already graduated.

The analysis of the answers to the following question “If you had to tell someone your perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo, what would you say?” led to four categories of CI, as shown in Table 1.

Table 1 – Distribution of frequencies of the CI categories identified in the answers to the following question “If you had to tell someone your perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo, what would you say?” – Brazil, 2015.

Category	Answers	%
A Positive opinions about the availability of bicycle lanes in the city of São Paulo	47	57.3
B Negative opinions about the availability of bicycle lanes in the city of São Paulo	11	13.4
C Need of more information about about the availability of bicycle lanes in the city of São Paulo	18	22.0
D Without any opinion about the about the availability of bicycle lanes in the city of São Paulo	6	7.3
Total	82	100.0

Source: the author

The proposed question had the purpose of identifying if the respondents perceived benefits and/or disadvantages concerning the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo. From the obtained answers, 57.3% of them indicated positive opinions about the subject. The respondents expressed interest in the availability and expansion of bicycle lanes, perceived as a cheaper and more sustainable contribution for moving around the city. They also mentioned that they always wanted to use bicycles as a mean of transport, but did not do so because they were afraid and worried about safety issues. The respondents with positive opinions believe it is a decision of the local government that will benefit citizens in general; they consider the bicycle lanes as their rights as citizens, and expect more investment for future expansions.

Around 13.5 % of the answers were concerned with negative opinions about the availability of bicycle lanes as an alternative to public transportation, mainly due to a lack of safety. The respondents with negative opinions mentioned they do not use bicycles at all, and they consider it inadequate to move around the city, neither to go to work nor to school. Critics mentioned that the project was poorly planned, with lots of restrictions concerning the coverage

of the lanes. They stressed it did not justify the expenses, besides the fact that the lanes, in their opinion, would be used much more for leisure than for transportation.

Respondents (22.0% of the answers) mentioned that even considering the bicycle lanes as a challenge for the supremacy of the buses and automobiles, they need more information about how they can be effectively used, or which will be the laws and rules for using them. They were also concerned about how the population as a whole would support this initiative and benefit from it.

Only 7.3% of the answers indicated that the respondents did not have any opinion at all about the availability of bicycle lanes as an alternative for public transportation, even knowing that the local government drew inspiration from similar policies in New York City, Bogota, Paris and other major cities.

None of the respondents mentioned they were against the availability of bicycle lanes in the city of São Paulo.

5 DISCUSSION

In Brazil, for most cities, around 80.0% of street space is dedicated to cars and other private vehicles, while only 30.0% of people use this mode of transportation for daily mobility. That includes traditional middle and upper class Brazilians and the result is stifling traffic throughout the day and evening. The level of hostility to today's traffic tie-ups is often related to cyclists, and toward those who are looking to create a place for bicycles on the streets (Metropolitics.eu, 2015).

The objective of the study was to explore the population perception about the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo. For the respondents with a positive perception, the bicycle lanes stand for a way of systematizing a variety of social innovation for sustainable consumption, as pointed out by Jaeger-Erben, Ruckert-John, and Schafer (2015), taking into account that using bicycles to move around the city will contribute to minimizing the consumption of fuel, the generation of pollution, and the users' health.

Appearing as a response to the low level of mobility in São Paulo, the bicycle lanes embody the notion that Brazilians can use bicycles as an alternative to private cars or to public transportation (Metropolitics.eu, 2015). It seems to respondents that the local government, by providing the opportunity for people to commute by bicycle, is moving toward a more progressive model of urban mobility, bringing benefits to the society as a whole (Bignetti, 2011, Klein, 2013; Howaldt & Schwarz, 2011).

To the extent that the established governmental structure and policies are unable to eliminate and solve current problems (Murray, Caulier-Grice, & Mulgan, 2010), such as public transportation in the city of São Paulo, social innovation becomes a way of searching feasible alternatives for the future of societies (Bignetti, 2011; Botsman & Rogers, 2010; Heinrichs & Grunenberg, 2012; Jackson, 2009; Ostrom, 2011).

The movement of offering bicycle lanes, led by city government, is achieving new levels as alternatives for a limited public transportation system. That also has an increasing potential for the promotion of sustainable development and transformation, aiming at more sustainable consumption practices (Jaeger-Erben, Ruckert-John & Schafer, 2015).

However, when it comes to such a disruption over mobility and urban shock treatment, the efforts have unleashed a fierce debate over mobility, the use of public spaces and the limits of political power in a metropolitan area with 20 million people (The New York Times, 2015).

When the respondents mention that they positively perceive bicycle lanes as an alternative for sustainable public transportation, there is a straight relationship with crisis as a driver of social innovation (Baker & Mehmood, 2015). Fuel crisis and the gaps in the offer of

public transportation in the city of São Paulo potentially led to the empowerment of local groups (Gerometta, Häussermann & Longo, 2005). In that context, the spatial impact of a crisis stimulates social innovation for collective action, specifically at the local level, and acts as an opportunity for societal change (Chapin *et al.*, 2009).

Among the positive opinions concerning the availability of bicycle lanes in the city of São Paulo, there were some comments that the local government measures are still timid, considering that the city is too large, and it can be reasonably navigable only by car or on crowded buses and trains, once the subway system is limited to certain metropolitan areas. Under that perspective, new governance practices can be selective, with preferential treatment to specific civil society groups, the ones affected by the limited transportation system, and the development of new ideas about place based environmental governance is important for understanding the emergence of sustainable places (Baker & Mehmood, 2015).

Chances for expansion of the bicycle lanes in São Paulo may be highlighted by their favorable acceptance, but on the other hand, the problems faced by many Brazilian large cities trace their roots to very old patterns of urbanization. Growth has presented specific features such as urban sprawl, priority for personal vehicles, socio-spatial segregation, and physical separation between jobs, housing, and opportunities. Consequently, residents of Brazilian cities often must contend with long commutes, unsafe street crossings, and a lack of social integration (Institute for Transportation and Development Policy, 2016).

Considering that ancient model for cities was socially, economically, and environmentally unstable, even the respondents with positive opinions about the availability of bicycle lanes pointed out that the current infrastructure and the established policies are unsatisfying to eliminate the public transportation problems in São Paulo, which is aligned with the arguments presented by Murray, Caulier-Grice, and Mulgan (2010).

Under another perspective, some respondents with negative opinions about the availability of bicycle lanes in São Paulo expressed that the city is not naturally bicycle-friendly, and that changing the established car culture will be a great challenge.

In São Paulo metropolitan area multi-lane expressways and ring roads connect the periphery, where most people live, to downtown and central areas where the jobs are. This creates sprawl, and in the short run, traffic jams may worsen as bike lanes impinge on precious road space (The Economist, 2014).

Respondents with a negative perception about the bicycle lanes mention they perceive no traffic death reduction with that innovation, and they describe São Paulo as a tense city, with continuous confrontation among drivers, pedestrians and bicycle riders.

Answers related to negative perceptions also indicated that for those respective respondents it was not clear whether the bicycle lanes project would go ahead or not, as many opponents argued that its feasibility studies had been inadequate (BBC News, 2015).

That perspective is aligned with Bignetti (2011), who states that when knowledge is applied to social needs, with the participation and cooperation of all involved actors, it may lead to creating new and sustainable solutions for the whole society.

The negative perceptions and fights over bicycle lanes in São Paulo indicate that citizenship embodies strong spatial dimensions and that, similarly, urban policies are often cultural battles (Chapin *et al.*, 2009).

However, in Brazil, bicycle is historically a symbol of idleness, linked to poverty and elite leisure. The idea that bicycles could be part of mainstream life and the economy is inconceivable for many Brazilians, who continue to perceive them as something antithetical to real modernity. For those Brazilians, using bicycles as a mean of transportation represents a lack of revenue (Metropolitics.eu, 2015).

On the contrary, in other countries, mainly the developed ones, bicycles, riders and paths are commonplace images of work and mobility, reinforcing that social relations are strongly

connected to social innovation, which may motivate citizens more efficiently (Moulaert, Macallum, Mehmood, & Hamdouch, 2013a, b).

Despite the negative perceptions about the availability of bicycle lanes, the local government at least introduced a new paradigm of the city, portraying cyclists commuting to work, alongside with cars and buses, as individuals with a legitimate claim on urban space (Metropolitics.eu, 2015).

However, 22.0% of the respondents point out that even considering bicycle lanes as a symbol of quality life, there is a need of more information about their availability, mainly related to how to use, the respective rules and safety aspects. Those respondents perceive the lanes as an innovation to the public transportation system in the city, and that should not be related to political parties. At the same time, they express that the local government should launch institutional campaigns to get more cars off the streets, to reduce pollution and to clean up the streets.

As far as information about safety aspects are concerned, there are two different approaches to be taken into account: some answers referred to deaths and injuries when cycling in the city (Anadolu Agency, 2015), but others mentioned the new bicycle lanes were a step towards the right direction in terms of safety in the public transportation system.

All the discussions and movements around bicycle lanes may be considered as a key point for civic debate about essential aspects of citizenship. The subject demonstrates the need to consider the economic, political and sociological dimensions of public space, and that will promote a better understanding of the policy and the positions of discontent in urban development.

New governance practices may be studied more deeply and selectively, with preferential treatment to specific civil society groups (Baker & Mehmood, 2015). When the subject comes to bicycle riders and the availability of bicycle lanes in São Paulo, the city government has carried out an effort to ease the city's traffic jams. Further to it, a strong debate over mobility, the use of public spaces and the effect of political power in a metropolitan has come up (The New York Times, 2015).

Under that perspective, new forms of governance may act in contradictory ways, empowering new actors but disempowering others (Swyngedouw, 2005). Over the past years, governments that are more progressive have been elected in Brazil, stressing the idea that citizenship is an asset to be exercised and it became an increasingly common notion among Brazilians. In a general way, persons have embraced citizenship as a broad cause, through which they may express themselves (Metropolitics.eu, 2015).

As it was mentioned by the survey respondents, no matter which were their opinions about the availability of bicycle lanes, they had an attitude of entitlement, and were concerned about the local government position, besides what they could do, as citizens, to participate in how the city space is used and the resources allocated.

The proposal of creating new or strengthening existing links between citizens, civil society organisations and the various public and private actors holds the potential to transform traditional governance relations either by changing existing norms or by producing new practices and policies for sustainable place making (Baker & Mehmood, 2015).

The negative opinions of the respondents go on the opposite way of that approach, when they state their criticisms to the offer of bicycle lanes in São Paulo. They mention that the city government has different interests other than contributions to improve life quality, and they do not perceive the availability of bicycle paths as a policy to promote sustainability in a large city. According to their opinions, the local government should draw up a robust and complete sustainable urban transport plan, with bicycle lanes included, with the main objective of successfully switching to environmentally friendly transport modes.

As far as negative opinions are still concerned, some answers to the survey point out the bicycle lanes are underused, and that they are precarious in the outskirts of the city. While the lanes in the central area had better quality asphalt and paints, in the outskirts they had precarious signaling, with garbage and mud as well.

That may be certainly related to a lack of adequate infrastructure or exclusionary policies. In such situations, local initiatives and civil society actions aimed at overcoming social polarisation, economic disadvantage and negative, environmental externalities rise as alternatives to bring solutions to various social problems (Baker & Mehmood, 2015).

Collective action is a way to achieve responses to social problems, such as those perceived differences in the offer and benefits of the bicycle lanes in the city of São Paulo. That would increase social interaction, make it easier to search ways to support economic viability and leverage political capabilities of the excluded groups. On the other hand, the developing sense of community would be difficult to achieve by acting alone (Moulaert *et al.*, 2010). Once these initiatives become successful, they may be amplified and replicated, across different spatial scales, to other regions and cities in the metropolitan area.

That approach aligns with Ionescu (2015), by stating that social innovation encompasses more than the creation of a new single model. Besides empathy, it creates changes in power related relationships, and in the way people think and act.

According to Tardif and Harrison (2005), and Perreault and Rollin (2008), restrictions to social innovation include social dynamics complexity and uncertainties, and the eventual resistance and tensions of the involved actors, due to the newness and the need of establishing commitments. Additionally, one of the main objectives of a social innovation project is the involvement of all strategic actors in the innovation process, which, therefore, will require cooperation among them (Maurer & Silva, 2014).

When it comes to the need of information about the bicycle lanes in the city, the respondents stress they want to know details about the technical studies carried out by the local government before the offer of the lanes. They perceive a lack of planning and request a broader discussion with the population concerning the benefits and disadvantages of promoting and using bicycles as a mean of transport.

The respondents also highlight that they consider the increasing importance of bicycles in the context of urban mobility, and they consider as important the measures that promote their use, including the expansion of the lanes to other regions in the metropolitan area.

However, they consider it is their legal right to disagree of the current project, since in their opinion it has been carried out without any planning, any public audiences or consultation, and without citizens' involvement. They also raise questions about safety in the lanes and in the urban mobility, including the interaction with buses, private cars and motorcycles.

From a legal perspective, the local government has proven by documents that the bicycle lanes project has been planned, and that the citizens have been heard during the discussions for the master plan. Indeed, in the scope of the city government there is a Thematic Bicycle Chamber with representatives following up the bicycle system implementation (Bike Zona Oeste, 2015).

In fact, under a governance perspective, recognizing a connection between public interests and the local government capabilities means addressing the search for spatial solutions and eventual temporal mismatches that may rise when managing human-environment interactions (Brondizio, Ostrom, & Young, 2009).

Another aspect to be highlighted in this discussion is the fact that none of the respondents mentioned they are against the availability of bicycles lanes as an alternative to public transportation in the city of São Paulo, even the ones who had negative opinions, or the ones who needed more information about them. Their perception aligns with citizens'

continuous search for better living conditions, which becomes one of their main objectives in life.

According to Ionescu (2015), when people are trying to improve their lives, there is an effect over social and economic progress, which reflects on predictable future, as well as in finding objective answers to problems related to fulfilling their human potential.

Under that context, Urama and Acheampong (2013) point out that a society that enjoys economic affluence is prosperous when it is adequately spread, taking into account that social and economic prosperity are linked and dependent on each other. Social inclusion, security, safety, and citizenship are some conditions that will lead to social prosperity. On the other hand, infrastructure development, green economy, job creation and workforce development are some conditions required by economic prosperity.

According to Operamundi (2013), cycling infrastructure is a cheaper way of improving living conditions in cities, because it is aligned with business environment improvement, insurance costs reduction, diversified cultural opportunities and tolerant social environments. Furthermore, sustainable prosperity becomes, then, a consequence of the balance between social and economic prosperity (Urama & Acheampong, 2013).

6 CONCLUSIONS

All the controversy about the availability of bicycle lanes in São Paulo does not only stand for a struggle about the logistics of everyday life in the city. With most positive perception by the population, it refers to the value residents attribute to public space and the legitimacy they grant to people who wish to occupy that space with something other than cars.

Lack of space, fuel crisis, environmental issues and other economic aspects observed in daily life in São Paulo become catalysts for several actions, which stimulate social innovation such as the offer of bicycle lanes and present a potential to social transformation.

The issue is not only whether bicycle riders deserve or not use São Paulo streets. The subject becomes the way the use of bicycle lanes by a group of citizens may socially affect the city more generally and other citizens, with different interests and expectations.

Some limits to this study must be considered to establish a perspective, as far as the previously discussed obtained results. That will contribute to further studies, so that the availability of bicycle lanes as an alternative to public transportation may be more explored and understood. The first aspect to be considered is that the interviews could have been carried out in different neighborhoods of the city, other than only in a central area. Another point is the size and composition of the sample. Being the sample considered for this study non-probabilistic, it does not allow the results to be extrapolated.

Future studies, with a bigger and probabilistic sample could evaluate the opinions of other actors involved in the transportation system as a whole, such as bus and taxi drivers, motorcycle drivers and private cars drivers. That would allow a broader scope of the results, and an interactive view of the availability of bicycle lanes as an alternative to public transportation in the city of São Paulo.

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