

# 4CITIES UNICA EUROMASTER IN URBAN STUDIES

## BIKE-SHARING AND THE PERFORMATIVE PROMOTION OF URBAN SUSTAINABLE MOBILITY

A COMPARISON OF THE
POLITICAL-AESTHETIC EXPERIENCES
PROVIDED BY
VIENNA'S CITYBIKE
AND PARIS' VÉLIB'

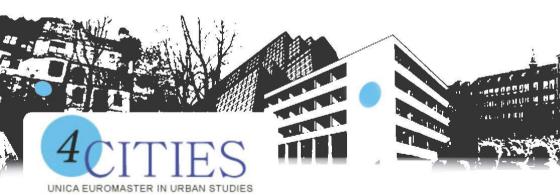
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## **MASTERARBEIT**

# Bike-sharing and the promotion of urban sustainable mobility

A comparison of the political-aesthetic experiences provided by Vienna's Citybike and Paris' Vélib

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## Abstract

Within the last decade, the urban phenomenon bike-sharing has colonised cities' streets on a global scale. Presented as an individualcollective sustainable mobility service, the transportation effects of bike-sharing schemes are said to change urban environments into "sustainable cities". Yet, a careful examination first notices that implemented bike-sharing services do not fulfil their sustainability promise. Second, it shows that they are actually the product of often long-established coalitions of interest between the outdoor advertising industry and municipalities, and whose action turns public space into attractive sites of public promotion. Considering in addition that advertisers have seized the techniques of the happening and other perception altering artistic innovations of the 1960s to operate them into their economic management of human attention, this master thesis suggests that the raison d'être of the bike-sharing phenomenon lies in its provision of an aesthetic experience transforming the perception of urban space and life by performing "urban sustainable mobility".

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« Comme toute organisation dynamique, les villes sont fluides et mouvantes et toute tentative de les figer par l'analyse ou la représentation risque de les tuer [...] La recherche sur la ville devient dès lors aussi dynamique que son objet et sans conclusion. Son intérêt pratique ne sera plus d'apporter un savoir justificateur aux législateurs mais de permettre de découvrir dans le parcours de l'analyse toujours de nouvelles possibilités au développement de la ville, du « vivre ensemble » [...] Ainsi donc, reconnaître que « la ville est complexe » implique l'abandon de tout espoir d'un savoir total sur elle. »

Henri Lefebvre in New Belgrade, 1986.

P. GUILBAUB, H. LEFEBVRE, S. RENAUDIE, "Projet pour le concours international pour la

restructuration de Novi Beograd", 1986, reproduced in: S. BITTER, H. WEBER, *Autogestion, or* 

Henri Lefebvre in new Belgrad, Vienna: Fillip and Sternberg, 2009.

"the unanticipated reappropriations of a given work in areas for which it was never consciously intended are some of the most useful"

Judith Butler, *Bodies that matter :On the discursive limits of "sex"*, New York:
Routledge, p. 19.

"les expérience urbaines, vécues sur le mode de la quotidienneté, ne sont pas neutres, mais au contraire, elles sont médiatisées par des relations de pouvoir."

Philippe Simay, Walter Benjamin: la ville comme expérience, p. 79

"All the world's a stage" William Shakespeare, As You Like It.

# 1 INTRODUCTION

## The story of bike-sharing in Vienna

The idea of a bike-sharing scheme in Vienna existed since 1991. It was planned five times, but only the last two were implemented. Called Viennabike, the first of them that ever made it into operation was a grass-root initiative funded by the City of Vienna. However, its operation failed shortly after its launch 2002. One year later, Gewista, Austrian leader in outdoor advertising and street furniture and fifth largest media corporation in the country, took over the idea.

After Viennabike, the City of Vienna, following its political agenda of sustainable development, was looking for a new provider. At the same time, JCDecaux, global player outdoor advertising and street furniture who bought the majority of Gewista's share in 2001 had a bike-sharing



Fig.1.: Viennabike station in 2002

system prototype that it wanted to test under real conditions. For Gewista, the decision of answering to the wish of the City was the result of the company's "good relation with the City" policy. Moreover, in spite of its failure, Gewista desired to capitalise over the high media coverage that Viennabike attracted.

Thus, in February 2003, Gewista hired Hans-Erich Dechant, the same man behind Viennabike, as project manager, and in March 2003 the Austrian out-of-home media company implemented the Cyclocity product of JCDecaux, named especially Citybike Wien. Today, Mr. Dechant is managing director and chief operating officer of Gewista's bike-sharing service. Between its launch and 2008, Citybike Wien was entirely funded by the revenues of Gewista and had 60 stations, all located in the inner districts of the city. From 2009 until today, the 2008 elected and current Socialist-Green municipal coalition has decided to finance every new stations. The number of stations has doubled since and the service crossed the Gürtel, a famous urban border.



Fig.2.: Citybike station in 2012

Fig.3.: Citybike logo in Vienna's public space landscape

#### The story of bike-sharing in Paris

The story of Vélib' starts officially in July 2007 by the launch of the largest bike-sharing scheme ever implemented at that time. The event was planned as an international showcase and enabled the worldwide breakthrough of the BS phenomenon. Behind Vélib', one finds a coalition of interest gathering on the one hand the mayorship and on the other hand the French outdoor advertising and street furniture multinational JCDecaux.

For JCDecaux, the bike-sharing business started in 1999 when its main competitor, Clear Channel, implemented 1998 in the French city of Rennes the first third generation large-scale bike-sharing service as commercial advantage to win the outdoor advertising and street furnishing bid issued by the municipality. In reaction, JCDecaux then created and developed its own product, Cyclocity. After a first experimental implementation in Vienna in 2003, JCDecaux was able to industrialise its new product and proposed it in 2005 to Lyon who was looking for a way to symbolise its sustainable development agenda. The Lyon case made bike-sharing known in France, and Paris' mayor, a socialist in coalition with the Greens, jealous of this coup, ahead of upcoming municipal elections and at the end of the outdoor advertising and street furnishing contract, wished a bigger, better and nicer scheme for its own city.



Fig.4.: Vélib' station

Fig.5.: Vélib's logo

The call for tenders issued 2006 by the City included the provision of street furniture with 2m<sup>2</sup> and 8m<sup>2</sup> outdoor advertising formats plus the implementation of a bike-sharing scheme. Clear Channel first won the bid against JCDecaux but after a fierce legal dispute, the former was defeated, and therefore JCDecaux could keep its most important market place and further maintain good relations with the City.

### Studying the bike-sharing phenomenon

On 21st of June 2011 was held in Prague at the Czech ministry of transportation the last of a series of public conferences concerning an EU-funded research project called "Optimising Bike-Sharing in Europe". One week earlier I had chosen the phenomenon of bike-sharing as research object for my master thesis in urban studies and of course I attended the conference to get first-hand informations. Until that date, my only experience with bike-sharing was to ride both a Citybike and a Vélib' bike.

This master thesis represents the final—and selective—outcome of the irregular research and writing path gone since 2011. It is an attempt to look at the bike-sharing phenomenon from a different point of view than from that of my starting conference, and an effort to apply a critical urban and social scientific attitude on an object seen until today only from the same limited angle.



Fig.6.: Announcement for OBIS' final conference in Prague 2011

# SETTING THE BIKE-SHARING PHENOMENON

# **2.1.** Terminologies and abbreviations used in this master thesis

## Bike-Sharing & Bike-Sharing Scheme/System/Service

Whether they are named "Public Bike", "Smart Bike", "Public Utility Bike" or "Public Cycle Hire" in the English-speaking world, "Fahrradverleihsystem" or "Stadtrad" in the German-speaking countries, and "vélos en libre-service", "vélos publics" or "vélos partagés" in the French-speaking nations, I will use in this master thesis the general terms of "bikesharing" or "bikeshare" to name the urban phenomenon with which we are dealing in this master thesis. Furthermore, I will employ the denominations "bike-sharing system" to refer to the bike-sharing product-service system (i.e. the system's equipment: docking stations, bikes, IT, services, etc.) invented, developed, marketed, distributed and implemented by a bike-sharing supplier/vendor, and the term "bike-sharing scheme" or "bike-sharing service" to designate the local (city-scale) operation and maintenance of this product-service by an operator in collaboration with the local authority (e.g. municipality). In order to ease the reading and if not specifically specified, I will use the acronyms "BS" to signify "bike(-)sharing" or "bike(-)share" and "BSS(s)" to mean both "bikesharing system" and "bike-sharing scheme or service".

#### Out-of-Home media

Another important wording is that of "street furnishing outdoor advertising Out-of-Home media". This designates the private business sector where firms provide local communities with street furniture while exploiting their public space to put up advertising bills. This economic sector has renamed itself more recently as "Out-of-Home media" to raise recognition as player of the mass media industry and at the same time distinguish itself from the media mostly consumed indoor such as TV, Press, Radio, Internet, etc. I will use in this work the abbreviation of "**OoH**", standing for "Out-of-Home", to name the "street furnishing outdoor advertising Out-of-Home media" industry.

### Urban Public Space/Site

Finally, the terminology "urban public space"—without consideration for its legal status (whether public or private)—refers to the specific physical space of urban environments which is mostly located outdoor and accessible to the general public without restrictions or hosting public attendance under the term and conditions of "house rules". These are the streets, squares, parks, shopping malls, transport terminals, etc. The term "urban public space" will be gradually replaced by that of "urban public site" to suggest that such public places have become strategical sites invested by media actors (e.g. the street furnishing outdoor advertising Out-of-Home media industry) for promotional sake, whether commercial or else. "Urban public space" as well as "urban public site" will be shorten with the acronym "UPS", if not specified.

## 2.2. Delimiting the research object

In its historical development, the BS phenomenon has undergone several mutations. According to Beroud (2007; 2010a; 2010b; 2012), Castro Fernández (2011), DeMaio (2003; 2004; 2008; 2009),

Sassen (2009) and Shaheen et al. (2010), it is commonly asserted that there have been so far three generations of bike-sharing services.<sup>1</sup>

## 1st generation of bike-sharing scheme/system/service

In line with them, the first occurrence of the BS phenomenon happened in the middle of the 1960s in the streets of Amsterdam. On 19 July 1965, dozens of "ordinary bikes, painted white, were provided for public use. One could find a bike, ride it to his or her destination, and leave it for the next user" (DeMaio 2009: 42). Thereby, these *Witte Fietsen* (white bikes) set the basic operational principles of BS: self-service, one-way, short-term and availability round-the-clock in urban public space.

## 2<sup>nd</sup> generation of bike-sharing scheme/system/service

In 1991, a 2<sup>nd</sup> generation appeared in Danish streets and in 1995 the first large scale BS scheme ever was set up in the Capital city with 1,100 bicycles. Copenhagen's *Bycyklen* (City Bikes), "were specially designed bikes for intense utilitarian use with solid rubber tires and wheels with advertising plates, and could be picked up and returned at specific locations throughout the central city with a coin deposit." (DeMaio 2009: 42).

Between 1965 and 2002² several schemes operating according to these two generations were launched in Western Europe and the USA. Yet, the large majority of them never really either became popular or gained political and economic lasting support (Beroud 2007; Castro Fernández 2011; Sassen 2009).³ Eventually, like in Amsterdam, where "bikes were thrown into the canal or appropriated for private use. The program collapsed within days" (DeMaio 2009: 42), almost entirely bikes ended up stolen, misused or broken. Under such conditions, maintaining the service led to increasing and unsustainable economic costs for the operators.

<sup>1</sup> Some authors put forward an upcoming fourth generation, but there's no consensus about its definition.

<sup>2</sup> Service launch and closing within a few weeks of 2nd generation BSSs Viennabike.

<sup>3</sup> Considering, of course, a few exceptions that lasted a long time due to strong political support: e.g. La Rochelle's Vélos Jaunes (launched 1976) and Copenhagen's 2nd generation BSS Bycyklen (1995-2012).

## 3<sup>rd</sup> generation of bike-sharing scheme/system/service

Nevertheless, in accordance with Beroud, Castro Fernández, DeMaio and Sassen, the breakthrough of BS in discourse and in practice occurred with the introduction of the technologically advanced 3<sup>rd</sup> generation of BS services between 1998¹ and 2007². With lessons learned from past experiences, BS systems "were smartened with a variety of technological improvements, including electronic-locking racks or bike-locks, telecommunication systems, smartcards and fobs, mobile phone access, and on-board computers" (DeMaio 2009: 42), thus preventing previous problems to occur since users could now be identified, bikes tracked and the rate of stations' occupancy be centrally managed in order to ensure the traffic's fluidity. Eventually, "IT-based systems became popular after the largest outdoor advertising company, Clear Channel, launched its first Smartbike program in Rennes, France" (Shaheen et al. 2010: 164).

Whilst "[e]arly European bikesharing systems [i.e. 1st generation] were small scale, operated as nonprofits, and focused on social and environmental issues" (Shaheen et al. 2010: 160), Haines & Skinner reported 2005 that "[m]ore recent bicycle pool systems [i.e. foremost those of 2nd generation] have increasingly been set up as tool to promote tourism in a number of cities" (2005: 12). Meanwhile, especially in the past decade, this curious urban phenomenon has spread worldwide like wildfire. The 3rd generation of BS schemes accounts nowadays for the most implemented and most popular system type in the world. As recorded by Paul DeMaio and Russell Meddin, American transport planners, bike-sharing experts and bloggers, there are about 700 local communities, located on five continents, which are equipped with a 3rd generation BSS at the date of 31 December 2013.

<sup>1</sup> Launch in Rennes by Clear Channel of the scheme  $V\acute{e}lo~\grave{a}~la~carte$  (1998-2009) with 25 stations and 200 bikes. This event was the starting point of alternative urban transportation experts' attention on the phenomenon of bike-sharing.

<sup>2</sup> Launch of first Barcelona's scheme *bicing* by Clear Channel (400 stations and 6,000 bikes), and then of Paris' scheme Vélib' by JCDecaux (1,230 stations and 15 to 17,000 cycles in average). Both prominent showcases, they provoked worldwide mainstream media attention.

<sup>3</sup> To get a global overview, see "The Bike-sharing World Map" at <a href="http://goo.gl/maps/tKsAa">http://goo.gl/maps/tKsAa</a>, which references all 3rd generation BSSs on the planet, as well as Oliver O'Brien's dynamic map at <a href="http://bikes.oobrien.com/global.php">http://bikes.oobrien.com/global.php</a>.

<sup>4 &</sup>quot;The Bike-Sharing Blog" at <a href="http://bike-sharing.blogspot.com/">http://bike-sharing.blogspot.com/</a>

<sup>5 &</sup>lt;a href="http://bike-sharing.blogspot.com/2013/12/the-bike-sharing-world-end-of-2013.html">http://bike-sharing.blogspot.com/2013/12/the-bike-sharing-world-end-of-2013.html</a>

Figures show that Europe is largely leading the pack with 410, followed by Asia at 161, North America with 93, South America with 32, Australia/Oceania with 4, and Africa with 1.1



Fig.7.: Screenshot from 3rd generation BSSs' world map. The green bicycle icon denotes a system in operation. The blue question mark icon denotes a system in planning or construction. The red caution icon denotes a system no longer in operation.

#### The research object

Thus, the fast increasing presence of such installations in the public space of cities and its pervasion in urban everyday life makes it worth to interrogate the phenomenon.<sup>2</sup> That being so, the research object of this master thesis in urban studies is the "BS phenomenon", in particular the 3<sup>rd</sup> generation of BSSs. Finally, the latter can more precisely be described as an electronically automated, 24/7/365 available, "self-service, short-term, one-way-capable bike rental offer in public spaces, for several target groups, with network characteristics" (OBIS 2011a: 10) more or less densely meshed with fixed docking stations. Strongly encouraged by a free-of-charge hire (generally) for the first half-hour, "[i]ndividuals use bicycles on an as-

<sup>1</sup> According to updated figures provided by Russell Meddin, Webmaster of the "Bike-Sharing Blog" (Email 14.5.14)

<sup>2</sup> In Paris, one can find in average a Vélib' docking station every 300 meters while a metro station every 500 meters. Furthermore, according to the operator there is 1 Vélib' bike per 97 inhabitants (<a href="http://blog.velib.paris.fr/blog/2013/07/15/velib-fete-son-6e-anniversaire/">http://blog.velib.paris.fr/blog/2013/07/15/velib-fete-son-6e-anniversaire/</a>). In the coverage areas of the schemes of London, Paris, Barcelona, Lyon, Montreal, Mexico City and New York City, the number of stations per km² (station density ratio) respectively equates to 8.4, 13.0, 10.3, 7.7, 8.2, 14.9 and 10.7 (Gauthier et al. 2013: 150, Appendix C), and there are respectively 23.3, 8.4, 9.2, 6.6, 22.7, 35.7 and 6.8 bikes per 1,000 residents (ibid).

needed basis without the costs and responsibilities of bike ownership" (Shaheen et al. 2010: 159). If not specified otherwise, the acronym "BS" or "BSSs" corresponds to that description.

## 2.3. Reviewing the literature

The following literature review first shows the discourse supporting the BS phenomenon's growth and second highlights important research outcomes on the effects induced by the implementation of BSSs.

#### Bike-sharing discourse

Like JCDecaux, who presents its BS system Cyclocity as a "wonderful means for getting around on your own or with others [...] [and whose] bikes encourage urban mobility",1 what BS vendors do promise is to release commuters from the apparent constraints and discomfort induced by individual and collective mass transit in cities: ownership and maintenance costs of a personal vehicle (car, bicycle, etc.), gambling for parking place, limited operating time of public transport, too long waiting time at public transport's stops, jam-packed public transport vehicles, difficult walkability or too long walk distances, insufficient or unreliable transit information, anonymity, crowding and lack of privacy, incivility and so forth. Thus, in the existing literature, BS is generally presented as an 'innovative public-individual urban mobility service' (Beroud 2007; Bührmann 2008; Marzloff 2009; Darbon 2013) offering a convenient and carefree access to and use of the cities' streets, and as a concrete measure to make cities sustainable urban environments (Castro Fernández 2011; Midgley 2011; OBIS 2011a, 2011b).

Up until today, most of the knowledge produced about the BS phenomenon has been the work of a handful BS-enthusiasts gathering on the one hand transportation planners, engineers, researchers and economists as well as urban cycling activists, and on the other hand promoters of digital technologies active on the issue of innovation in

<sup>1</sup> See <a href="http://en.cyclocity.com">.

the service economy. What they believe in and presume is "to enhance mobility, alleviate automotive congestion, reduce air pollution, boost health, support local businesses, and attract more young people" (Larsen 2013) in the centre of cities by using the way we get around as leverage for social and urban change.<sup>2</sup> In order to realise that goal and to optimise existing BSSs, the sum of their work establishes an expanding taxonomy analysing technical and operative aspects of the transportation system BS, including: how users access a bike; the flows of bicycles; users behaviour; the model of service provision (i.e. the business model); the scheme's scale (small or large, i.e. the number of bikes and stations); the spatial rationale (i.e. the localisation of stations and bikes: whether integrated within a comprehensive inter- and multimodal urban transportation strategy or within a visibility network of brand marketing, for instance, via outdoor advertising); the operative partnership (i.e. stakeholders' configuration); pricing (i.e. cost per rental time: short or long term); etc.

The idea that BSSs entails a variety of potential benefits and advantages over traffic-, environmental- and social-related issues in cities is largely widespread. For Shaheen et al., "[p]otential bikesharing benefits include (a) increased mobility options, (b) cost savings from modal shifts, (c) lower implementation and operational costs (e.g., in contrast to shuttle services), (d) reduced traffic congestion, (e) reduced fuel use, (f) increased use of public transit and alternative modes (e.g. rail, buses, taxis, carsharing, ridesharing), (g) increased health benefits, and (h) greater environmental awareness" (2010: 159). Gauthier et al. add that "[b]ike-share has two key advantages when compared to other

<sup>1</sup> Regarding the former, this observation is also made by Martin Tironi (2013: 42-3). We can mention here, for instance, the work done in the USA for a decade by Paul DeMaio and Matt Christensen, respectively available at their blogs <a href="http://bike-sharing.blogspot.com">http://bike-sharing.blogspot.com</a> and <a href="http://bikeshare.com">http://bikeshare.com</a>. For the latter, see the editorial work achieved since 1999 in France by the non-governmental not-for-profit organisation "Fondation Internet Nouvelle Génération" (Fing, <a href="https://www.fing.org">www.fing.org</a>) including Fing director's manifesto: Daniel Kaplan and Hubert Lafont, Mobilités.net: Villes, transports, technologies face aux nonvelles mobilités (LGDJ, 2004), as well as publications in collaboration with fyp éditions (<a href="http://www.fypeditions.com/rubrique/fabrique-des-possibles/">http://www.fypeditions.com/rubrique/fabrique-des-possibles/</a>), especially the foresight research program "Villes 2.0" and the book written by Bruno Marzloff (see literature list). In English, see Aida Esteban Millat, Sascha Haselmayer and Jakob H. Rasmussen, Connected Cities: Your 256 Billion Euro Dividend. How Innovation in Services and Mobility Contributes to the Sustainability of our Cities (Design London and Royal College of Art, 2010).

<sup>2</sup> As it is clearly asserted, for example, in the OBIS *Handbook* addressing local authorities interested to implement a BSS: "Define Bike Sharing Schemes as a Catalyst for Change" (OBIS 2011: 39).

transportation projects: implementation costs are comparatively low and the timeline is short. It is possible to plan and implement a system in one mayoral term [...], which means that benefits to the public accrue more immediately than in most transportation projects" (2013: 14). Yet, as a matter of fact, Fishman et al. admit that "little research has been conducted to evaluate to what extent these programs accomplish such benefits" (2013: 149). A critic already pronounced three years earlier by Shaheen et al. in a similar analysis: "very few studies evaluate behavioral shifts" (2010: 164), and "[g]iven the relatively limited impact data, more research is needed on the social and environmental benefits of bikesharing" (ibid: 165). A judicious suggestion still not followed, as it seems.

## Effects of bike-sharing schemes: environment, traffic, social, political

Nonetheless, despite limited research, some noticeable empirical findings about the effects of the implementation of BSSs do already exist.<sup>2</sup> To begin with, no serious and comprehensive survey evaluating environmental impacts has yet been conducted. Next, from a transportation point of view—the most emphasised 'potential benefit area'—results showing a "sustainabilisation" of traffic, like in the Chinese city of Hangzhou, are ambiguous.<sup>3</sup> In the European and North American cities of Brussels, Vienna, Paris, Lyon, Barcelona, Dublin, London, Montreal and Washington DC, however, figures do not show

<sup>1</sup> See also Bührmann 2007: 2,4; NYCDCP 2009: 14-19; Beroud 2010a: 5-6.

<sup>2</sup> The following listing of the effects of the implementation of BSSs does not pretend to be exhaustive and is the result of a selective reviewing of the existing literature to highlight research outcomes assumed as relevant to be cited in the scope of this master thesis.

<sup>3</sup> For Susan Shaheen and her colleagues from the Transportation Sustainability Research Center at University of California Berkeley, their survey of the then largest BSS worldwide reveals that on the one hand "bikesharing is capturing modal share from bus transit, walking, autos, and taxis [which] suggest that bikesharing acts as both a competitor and a complement to the existing public transit system" (2011: 40). On the other hand, "bike-sharing appears to be reducing automotive travel, especially for bikesharing households that own cars. This finding suggests that car ownership does not lead to a reduced propensity to use bikesharing. In fact, members exhibited a higher rate of auto ownership in comparison to nonmembers. Hence, bikesharing appears to have reduced automobile emissions. Although some of this reduction appears to come at the expense of public transit ridership, in a city where buses are very crowded, a reduction in transit use among those that shift to bikesharing may provide new capacity for others that cannot" (ibid.).

that BSSs have changed car drivers into bike riders.<sup>1</sup> In general, "the majority of scheme users are substituting from sustainable modes of transport rather than car" (Fishman et al. 2013: 148). In addition, whether BSSs have provoked a growth in private cycle commuting, relieved motorised traffic congestion and significantly improved interand multimodality are still open questions.<sup>2</sup> On the other hand, "bike share program have undoubtedly enhanced user convenience and reduced travel time" (ibid: 162).

Different phenomena have been unveiled regarding the social effects of a BSS. First, the absence of correlation between BS and gentrification is noteworthy.<sup>3</sup> Second, as Tironi notes about his Vélib' case study, contrary to discourses on dematerialisation, deterritorialisation and global standardisation and homogenisation processes associated with the unfolding of digital technologies, the operational efficiency of a BSS to produce flowing traffic heavily relies on unpredictable, fragile and flexible maintenance and supervision work. Thus, "smart city's infrastructures—comprising automated self-service services—are still (and strongly) backed by [locally] self-made work process and knowledge" (2013: 428; my own translation). Besides, somehow paradoxically, "bike share users are most frequently motivated by convenience" (Fishman et al. 2013: 162), but "unlike with other transport means, being mobile with a Vélib' is more work-intensive for users" (Tironi 2013: 432; my own translation).

In matters of politics, several effects are noteworthy. I give here a few. First, "politics today has become "inseparable from the art of managing visibility"" (Koepnick 1999: 226). Cities implementing an operationally successful BSS have seen their image in the domain of "sustainable mobility" bettered. Indeed, it has been shown that "BSSs are an element of urban actors' marketing strategies promoting their cities' sustainability and sustainable mobility image (Sailliez 2010: 54; my own translation). By contingency, cities have also seen their legitimacy as

<sup>1</sup> For Brussels, see Sailliez 2010: 61. For Vienna, see Schneeweiß 2012: 7. For Paris, see Sailliez 2010: 61 and Razemon 2012. For Lyon, see Huré 2013: 504. For the other cities see Fishman et al. 2013: 151.

<sup>2</sup> See Fishman et al.: "the potential for bike share to act as a catalyst for private bike riding has received little attention" (2013: 162).

<sup>3</sup> See Laurence Sailliez 2010: 54-9.

<sup>4</sup> Quoting John B. Thompson, *Ideology and Modern Culture* (Basil Blackwell, 1990), pp. 16-17.

solution provider and governmental actor targeting the climate change agenda increased. Indeed, "the establishment of bike share programs has prominently enabled cities to demonstrate their commitment to addressing climate change, population health issues, traffic congestion, oil dependence and livability" (Fishman et al. 2013: 150). Both, image and legitimacy, represent an incontestable advantage in the heightening inter-city competition to attract capital.<sup>1</sup>

Second, in order to conduct the conception, implementation and management of infrastructural urbanistic interventions like Vélib', local authorities have changed their institutional configuration and scale of action.<sup>2</sup> Cities, under the leadership of their mayors, have selected actors such as multinational entrepreneurs, international research institutions and renowned designers to form new public policy coalitions and develop new governmental rationality in order to renovate, build-up and co-produce their local intervention capacity and to experiment *in vivo* operational solutions associated with urban development policies labelled as "innovative city", "creative city", "sustainable city" and "smart city".<sup>3</sup> Furthermore, these new issuebased urban coalitions have invested transnational advocacy and policy networks in order to control and reuse them to maximize their international image and legitimacy.<sup>4</sup>

Lastly, from a political communication viewpoint, these urban coalitions, as in the case of Vélib', communicate on the basis of a doublespeak, one internal characterized by incertitude and contingency, and on the other side, addressing service members and public audience, a more "scientific"—and therefore more reassuring—semantics to increase these urban projects' acceptance.<sup>5</sup>

<sup>1</sup> See Maxim Huré 2013 and Martin Tironi 2013.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> As Maxime Huré (2013) explains based on his case study of transnational bike networks and their role to formulate and implement cycling policies in European cities.

<sup>5</sup> See Martin Tironi 2013: 34, 419-420.

## 2.4. Designating the problem

As we have just seen, there has been no clear and significant recorded "sustainabilisation" generated by the implementation of BSSs in the 'potential benefit areas' (i.e. traffic, environment and social). Therefore, it is possible to state that in terms of transportation, BSSs have so far not been able to bring about the reality announced by the "BS lobby", let alone trigger any social and urban change towards "sustainable cities". Thus, the transportation agency of BS has become questionable to me. Then, despite the obvious gap between discourse and effects, why does the number of BS services' implementations worldwide continuously grow and more, and more mayors on all continents choose to equip their city with such installations?

#### The sustainability of bike-share as a discursive practice

Perhaps not well enough ridden, BSSs are for sure extensively written and spoken about *as if* they were what they represent. Discursive practice, not transport practice, seems to bring to life the sustainability of BS. "Discourse is a [social] practice not just of representing the world, but of signifying the world, constituting and constructing the world in meaning" (Fairclough 1992: 64). French philosopher Michel Foucault (1926-1984) meant by discursive practices "ways of establishing orders of truth, or what is accepted as 'reality' in a given society". In this regard, it is crucial to observe that the understanding of BSSs as sustainable urban mobility solutions is the result of a discursive construction promoted by influential experts like Eric Britton, Peter Midgley and the already cited Paul DeMaio who advise local and national governments as well as multilateral organisations like UN and World Bank in their policies. In the processes of knowledge production and circulation, these specialists have constructed the BS

<sup>1</sup> From the entry "Discourse" in Michael Lewis Goldberg's academic homepage available at <a href="https://faculty.washington.edu/mlg/courses/definitions/discourse.html">https://faculty.washington.edu/mlg/courses/definitions/discourse.html</a>

<sup>2</sup> See Source <a href="http://en.wikipedia.org/wiki/Eric\_Britton">http://www.ecoplan.org/>, <a href="http://worldstreets.wordpress.com/">http://worldstreets.wordpress.com/>.</a>

<sup>3</sup> See <a href="http://tinyurl.com/ma9pogw">, <a href="http://thecityfix.com/blog/author/pmidgley/">, <a href="http://www.gtkp.com/assets/uploads/20100214-153603-959-UMTIS%20Shared%20Bikes.pdf">, <a href="http://www.gtkp.com/assets/uploads/20100214-153603-959-UMTIS%20Bikes.pdf">, <a href="http://www.gtkp.com/assets/uploads/20100214-153603-959-UMTIS%20Bikes.pdf">, <a href="http://www.gtkp.com/assets/uploads/20100214-153603-959-UMTIS%20Bikes.pdf">, <a href="http://www.gtkp.com/assets/uploads/20100214-153603-959-UMTIS%20Bikes.pdf">, <a href

phenomenon as aggregating four constitutive paradigms, to me stemming from practices in innovation management applied to the transportation sector. It appears that each one of these paradigms are previously already assumed as sustainable in their essence and therefore in their agency: (i) the object bicycle; (ii) IT-infrastructures; (iii) the service economy of "sharing"; (iv) the transport demand management concept of 'mobility service'.

It is also interesting to note that the emergence of these four paradigms in their current meaning and on the other the breakthrough of and interest towards BS with the introduction of 3<sup>rd</sup> generation BSSs precisely occurred simultaneously during the last two decades, thereby influencing each other in their discursive and material construction as well as perception.

## The four self-referential paradigms of bike-sharing: bicycle, IT, product-service system and mobility service

The first and most obvious is the *object* bicycle itself, a low-cost individual vehicle that cannot not truly be environmental-friendly. Thus, "[a]s contemporary urban policy seeks to overcome the challenges presented by car dependence, replacing car journeys with bicycles has emerged as an increasingly common response in many cities" (Fishman et al. 2013: 150). Hence, "the rise of bike share has come about ostensibly in an attempt to capitalize on the potential benefits associated with an increase in cycling" (ibid).

Secondly, since electronic information and communication technologies enable the optimisation of time and space resources via dematerialisation and telepresence—therefore theoretically exempting physical travel of people and goods and consequently reducing environmental impact of human activity—their application to transportation systems in general and BSSs in particular has endowed them with the same environmental quality. This is best illustrated by the

<sup>1</sup> This fact was the reason why the opponents of the Vélib' project prior to its launch, mainly members of the green party Europe-Écologie les Verts at the municipal council of Paris, failed in their critics. Tironi explains that 'la symétrie « vélos = ville durable » établie par le projet était trop solide pour être moralement démontée par les écologistes. [...] Pour arriver à monter l'opinion publique contre la réalisation du nouveau projet de transport, il aurait fallu déconstruire le couple vélo/ville durable, ce qui impliquait un travail argumentatif immense qui n'a pas pu aboutir' (Tironi 2011: 17).

term "Smart Bike", coined by DeMaio in its first paper on BSSs in 2001 to describe the first 3<sup>rd</sup> generation BS schemes.<sup>1</sup> If anything, the concept of the 'rebound effect' has long established that mere technological improvement optimising the efficiency of a resource use does not reduce its consumption.<sup>2</sup> Thus, "[e]nhanced efficiency may create greater demand for transportation" (Plaut 2004: 165). Indeed, "[i]ncreasing use of advanced technologies in third-generation bikesharing has led to a growing market for technology vendors" (Shaheen et al. 2010: 164). Therefore, "more communications appear to be producing an expanded use of transportation systems" (Plaut 2004: 165), provoking growing consumption of energy and resources on a global scale and therefore increasing environmental costs.<sup>3</sup>

Thirdly, as "Collaborative Consumption" guru Rachel Botsman declares, "[b]ike sharing is a great example of a product-service system" (NESTA 2010: 10). Also known in economic and business terms as 'function-oriented business model', a product-service system is a business model concept developed in academic circles in the 2000s to assist manufacturing firms in times of reduced profitability, economic restructuring, harsh competition and ecological issues to improve their performance by the "bundling of services with products" (OECD 2000: 3). It has been "proposed as a way of dealing with unsustainable patterns of consumption in the business-to-consumer domain" (Mont 2004: 135), and "in theory at least may provide opportunities to satisfy demand using significantly fewer resources and reduce the impacts associated with production, use and disposal" (Bhamra et al. 2006: 1456). Thus, to cite Botsman again, consumers "[p]ay for the benefit of using a product without needing to own the product outright" (NESTA

<sup>1</sup> Paul J. DeMaio, Smart Bikes: Public Transportation for the 21st Century. Commuter Choice/Bicycling Programs, City of Alexandria, Virginia, July 2001. Available at <a href="http://www.ferndale.wednet.edu/fhs/departments/envsci/yellow\_bike\_cs.pdf">http://www.ferndale.wednet.edu/fhs/departments/envsci/yellow\_bike\_cs.pdf</a>.

<sup>2</sup> See <a href="http://en.wikipedia.org/wiki/Rebound\_effect\_%28conservation%29">http://en.wikipedia.org/wiki/Rebound\_effect\_%28conservation%29</a>.

<sup>3</sup> See Eric Williams, "Environmental effects of information and communications technologies", in *Nature*, 479(7373), 17 November 2011, pp. 354-358, doi: 10.1038/nature10682, available at <a href="http://www.nature.com/nature/journal/v479/n7373/full/nature10682.html">http://www.nature.com/nature/journal/v479/n7373/full/nature10682.html</a>; and the article "What is the human and environmental cost of new technology?" published by Richard Maxwell and Toby Miller on 27 February 2013 in The Guardian, available at <a href="http://www.theguardian.com/sustainable-business/human-environmental-cost-new-technology">http://www.theguardian.com/sustainable-business/human-environmental-cost-new-technology</a>.

<sup>4</sup> See the entry "Product-service system" on Wikipedia: <a href="http://en.wikipedia.org/wiki/Product-service\_system">http://en.wikipedia.org/wiki/Product-service\_system</a>.

2010: 22). Hence, they "share" its usage, thereby "[d]isrupting traditional industries based on models of individual private ownership" (ibid). Accordingly, the "sharing economy" of servicised goods—especially "smart products", like DeMaio's 'Smart Bikes'—should enable the achievement of a state of sustainability in industry production and consumption. Yet, as Bhamra et al. critically observes, "PSS [product-service system] concept [...] and associated concepts [...] are prescriptive in nature" (2006: 1457), i.e. normative and not empirical.

Fourthly, as mentioned in the previous section, BSSs are presented as a 'mobility service'. A mobility service can mean a service mediated via mobile communication devices, e.g. smartphone apps. However, in transport practice, "[t]he term "mobility service" is often used to designate the provision by a public or private actor of alternative transport modes to private and single occupant use of cars (bike, carpooling, carsharing, shuttle...)" (ARENE 2008: 6; my own translation). This notion translates a market-based demand-oriented "approach to mobility management which seeks on the one hand to improve the space- and time-efficiency of personal trips, and on the other, in some cases even to seek alternative forms of access which avoid the need for some trips altogether" (Skinner et al. 2004: 1). While transportation demand management assumes to reduce environmental impacts of traffic, the idea of mobility takes a geographical stance and is synonym with accessibility,2 thereby related to social and economic sustainability. Yet, spatial mobility is not the mere neutral and measurable outcome of personal physical movement that can be "impacted" by environmental policy measures. In contrary, it is first and foremost a central value of Western culture as well as an academic concept. First coined by American sociologist Pitirim Sorokin in its 1927 book Social Mobility to explain the movement of individuals and social groups in social hierarchy and stratification, the term has been more recently spatialised by British sociologist John Urry to intellectualise the effects of increasing movement of people, goods and ideas due to cheaper and greater accessibility to communication and

<sup>1</sup> See the entry "Transportation demand management" on Wikipedia: <a href="http://en.wikipedia.org/wiki/Transportation\_demand\_management">http://en.wikipedia.org/wiki/Transportation\_demand\_management</a>.

<sup>2</sup> See Haines & Skinner 2005: 8-9, section 2.3 Accessibility.

transportation capabilities.<sup>1</sup> While the former meaning ultimately helped to legitimate the discourse on the American dream, the latter is suspect of supporting ideological imperatives of social flexibility and fluidity where immobility has become a social stigma.<sup>2</sup>

In this respect, 'mobility' has started to be seen as a capital (as in Pierre Bourdieu's understanding),<sup>3</sup> as "a possible new factor of social differentiation" (Kaufmann 2002: 1) "appear[ing] as an indicator of inequality" (ibid: 2). As for Max Rousseau, the "mobilitary" ideology produces urban places where bodies are urged to keep moving; staying in non-designated areas becomes a reprehensible deviant behaviour.<sup>4</sup>

Finally, even though bicycles, electronic information technologies, the "sharing economy" and mobility services are seen as intrinsically sustainable, unfortunately the impact of their aggregated application in the form of BSSs does not automatically causes sustainability. To believe it does shows a reductionist interpretation of reality and falls under the fallacy of technological determinism. Moreover, the urban sustainable mobility that the traffic of BSSs' cycles are said to bring forth clearly seems to be a prescribed, not described, reality. Indeed, these positivistic assertion of sustainability have to be taken cautiously since they are policy-oriented and therefore to a large extent do not distinctly differentiate between *ex ante* and *ex post*, i.e. motivations to implement a BSS and causal effects, a priori claims and scientifically evaluated findings. A good illustration of such rhetoric can be taken

See John Urry, Sociology Beyond Societies: Mobilities for the Twenty-First Century, Routledge, 2000, and Mimi Sheller & John Urry, "The new mobilities paradigm", in Environment and Planning, 2006, A 38(2), 207-226, DOI:10.1068/a37268.

<sup>2</sup> See Christophe Mincke and Bertrand Montulet, "L'idéologie mobilitaire", in *Politique Revue de débats*, 64, Avril 2010. Available at <a href="http://politique.eu.org/spip.php?article1075">http://politique.eu.org/spip.php?article1075</a>>.

<sup>3</sup> See Vincent Kaufmann, Manfred Max Bergman and Dominique Joye, "Motility: mobility as capital", in *International Journal of Urban and Regional Research*, 28(4), pp. 745-756, 7 December 2004, DOI: 10.1111/j.0309-1317.2004.00549.x. Available at <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.0309-1317.2004.00549.x/pdf">http://onlinelibrary.wiley.com/doi/10.1111/j.0309-1317.2004.00549.x/pdf</a>.

<sup>4</sup> Max Rousseau, "La ville comme machine à mobilité. Capitalisme, urbanisme et gouvernement des corps", in *Métropoles*, 3, 2008. Available at <a href="http://metropoles.revues.org/2562">http://metropoles.revues.org/2562</a>>.

See Wiebe Bijker and Trevor Pinch, "The Social Construction of Facts and Artifacts: Or How The Sociology of Science and the Sociology of Technology Might Benefit Each Other", in: Wiebe Bijker, Thomas Hughes and Trevor Pinch (eds. 1987): The Social Construction of Technological Systems. New Directions in the Sociology and History of Technology, Cambridge, MA.: MIT Press, pp. 17-50. See also Peter Madsen, Introduction, in: Madsen, Peter, Plunz, Richard (eds. 2002): The Urban Lifeworld: Formation, Perception, Representation, London: Routledge, pp. 1-41. Especially the section "IV The Phenomenological Concept of Lifeworld and Urban Analysis", pp. 9-15.

from the infographics occasionally provided by BS operators to communicate with service members and the general public where statistical figures presented with a nice design layout translate for example the amount of cumulated kilometres covered by the bikes into "saved CO2" or "burnt calories" in order to support their environmental and lifestyle arguments regarding air pollution and public health.<sup>1</sup> Therefore, BS' sustainability takes place above all in the socio-linguistic world of meaning, not in the "natural" world of traffic flows.

Without contesting that the urban infrastructural interventions BSSs bring about potential change, what becomes clear so far is that the problem is to consider the transformational perspective only in terms of technological impact and organisational management. In consequence, I suggest that if any change happens at all, it is not due to the effects of BS bikes' traffic over, among others, congestion or air pollution. Therefore, although being useful, the knowledge brought forth by the "BS lobby" is too narrow to understand the efficacy and finality of BSSs outside of the realm of transportation.

## 2.5. Seeking an alternative research path

Then, how to otherwise approach the BS phenomenon? What kind of alternative epistemological path(s) to the prevailing transportation and innovation management biases do(es) exist to study BSSs? Although we can easily observe that by means of their presence and movement BSSs have been colonising cities' public space in a very rapid pace, it is crucial to notice that the BS phenomenon has never been put into an urban perspective. Therefore, what can we discover about the BS phenomenon if we put an emphasis on public space,—i.e. BSSs' territory of intervention—especially regarding its usage.

See for instance in the case of Vélb' in Paris: <a href="http://blog.velib.paris.fr/blog/2013/07/15/">http://blog.velib.paris.fr/blog/2013/07/15/</a> velib-fete-son-6e-anniversaire/> <a href="http://blog.velib.paris.fr/wp-content/uploads/2013/07/">http://blog.velib.paris.fr/wp-content/uploads/2013/07/</a> infographie6ansDef.png>

## The Out-of-Home media industry as urban public space ameniter<sup>1</sup>

A first precious hint is given by the fact that BSSs are without any doubt a commercial and industrial novelty originating from the outdoor advertising and street furnishing industry, a sector of activity quite different from that of transportation. Indeed, as Maxime Huré notes, "harsh competition obliges [OoH] companies to continuously innovate in order to stay attractive to local authorities. [...] It is in a context of innovation rush that Clear Channel and JCDecaux gradually put in their [street furniture] catalogue the provision of a BS service" (2007: 11; my own translation). Thus, the breakthrough and current "success" of 3<sup>rd</sup> generation BSSs has occurred when the multinational OoH corporates Clear Channel and ICDecaux, at the time of the deadline of street furnishing contracts and outdoor advertising rights with French municipalities, came up with the idea to offer them a free-of-charge (i.e. funded by the firm's own revenues generated by the selling of advertising space on the cities' street furniture and billboards) BS service as commercial advantage against their market competitors in order to win public tenders. Thus, for instance, Clear Channel took Rennes' market to JCDecaux in 1997 by offering the municipality its new Smartbike product; in 2006 in Paris, Clear Channel first won the bid but after a decisive trial opposing the former with ICDecaux, the latter was able to keep its flagship city and install its product Cyclocity. In addition, to get on the bandwagon, both companies' new product were marketed as an enchanting solution for polluted urban environments. Large media coverage of environmental disasters like Chernobyl or other oil slicks and of the setting of the environment on international agenda prepared a high visibility of "sustainability" issues in the public opinion in the 2000s, becoming thereby a hot and positively perceived issue in collective consciousness and imaginary, its image consequently growing in value. Perfect for an advertiser!



Fig.8.: Gewista's and JCDecaux's logo, and slogan

<sup>1 &</sup>quot;Ameniter" is a neologism derived from amenity and means a provider of amenities in the context of the physical arrangement of public space with for instance street furniture. By extension, to amenity is to provide with amenities.



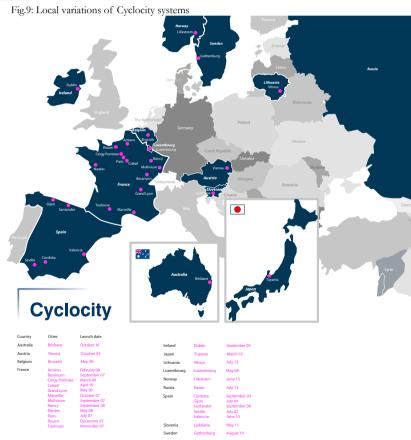


Fig.10. Cities equipped with a Cyclocity system provided by JCDecaux

Major international OoH companies such as American Clear Channel, French ICDecaux, Italo-Spanish venture Communicare Cemusa and German Nextbike compose the BS industry along other governmental operators and transport providers. They equip several hundreds cities in the world with their "ready-to-go" product-service systems, respectively named Smartbike, Cyclocity, Bicincittà and the eponym Nextbike, where a city buys the whole package (including: infrastructure, bikes, management software and hardware, operational service, staff, etc.). According to an interview with Anthonin Darbon (2013), COO of Cyclocity France, the operation of JCDecaux's BS product-service comprises the provision and maintenance of bikes and fixed stations, the traffic flow management, smartphone apps, advertising the service, a telephone and electronic customer-relationship-management, the production and the provision for statistical purposes of digital data generated by bikes' and users' traffic, editing and printing of maps, and the co-management of a service members' committee.



Fig.11: JCDecaux's co-CEO Jean Francois Decaux, Vienna's mayor Michael Häupl and Gewista's CEO Karl Javurek celebrating 90 years of Gewista

In 2010, Shaheen et al. reported that whereas "local governments operate 27% of existing bikesharing systems" (2010: 164), only two companies, Clear Channel and JCDecaux, with respectively 16% and 23%, dominated the BS world market holding 39% of its share, 1 even though, as recorded by DeMaio in 2011, nearly thirty BS system

<sup>1</sup> See Shaheen et al. 2010: 164.

suppliers were active.<sup>1</sup> The coalition between municipalities and advertising, appraised as "[t]he most prominent funding sources for third-generation bikesharing" (Shaheen et al. 2010: 163), is often only confirming already long established relations between metropolitan leadership and OoH industry united in urban public space 'design-related coalitions'.<sup>2</sup>

Somehow, the link between advertising, consumption industry and a public object, like a BSS' bike, could have already been highlighted as soon as 1995. Indeed, first, ads were already covering Copenhagen's *Bycyklen* wheels, and second, unlocking a 2<sup>nd</sup> generation BSSs bike and a shopping cart—archetypical symbol of consumerism—curiously operates the same way. Yet, BSSs are neither simply bikes, nor mere rolling bill boards.

In addition, the following entirely reproduced extract of a short online article about Vélib' identifies a direct filiation between the nature and purpose of street furniture and that of BSSs, offering a further argument to ground the emergence of BS in the continuity of the strategic development of street furnishing and outdoor advertising:

"There has been for several years a noticeable and steady change regarding urban furniture, passing from a strictly utilitarian dimension to an aesthetic one. All around the city, pieces of street furniture such as bus shelters, *Morris* columns, benches, candelabras, press kiosks, *Wallace* fountains, etc. on the one hand contribute to mediate an image and a style in accordance with the history of the city and on the other hand with the desired self-image it wants to project via its public places. Thus, within a growing range of increasingly differentiated assortment of street furniture, mayors can select their preferences to best reflect the spirit of their city.

Yet, the recent development in making so far immobile urban furniture become "mobile" is even more striking. The bike-sharing scheme Vélib' is the latest example of this trend. The aesthetic appearance of its predominant lilac docking stations scattered throughout Paris was chosen with care. The bikes themselves were designed as moveable

<sup>1</sup> See Paul DeMaio, Bike-sharing Vendors: A to Z, Cycling Mobility, June 2011, available at <a href="http://www.metrobike.net/wp-content/uploads/2013/10/Bike-sharing-Vendors.pdf#page=1&zoom=auto,0,800">http://www.metrobike.net/wp-content/uploads/2013/10/Bike-sharing-Vendors.pdf#page=1&zoom=auto,0,800</a>. Unfortunately, exact and regularly updated figures of the BSSs' market share do not exist.

<sup>2</sup> See Sabine Knierbein's concept of 'Gestaltwirksame Koalition' in the chapters three, four and five of her published doctoral dissertation Die Produktion zentraler öffentlicher Räume in der Aufmerksamkeits-Ökonomie. Ästhetische, ökonomische und mediale Restrukturierungen durch gestaltwirksame Koalitionen in Berlin seit 1980 (VS Verlag, 2010).

extensions of the fixed bike terminals along the same aesthetic rationale.

In this way, each bike is instantly recognizable by people in the city as a Vélib' bike, thereby each one of them is a piece of Lego, an additional element of Paris' street furniture.

This concern goes beyond the practical aspect to allow everyone to immediately identify Vélib' bikes and stations. It is part of the desire to develop 24/7 in the collective unconscious of dwellers the whole philosophy of Vélib: soft mobility, multimodality, ecology. Thus, we see how the boundary between "fixed furniture" and "rolling furniture" fades and creates not only a new collection of street furniture, but also a new lifestyle". 1



Fig.12: Chronological development of JCDecaux's urban furniture catalogue

#### Urban public space as medium

Second, in the existing BS literature, UPS, where BS services are installed, are apprehended as only hosting traffic. Yet, as French sociologist Isaac Joseph pointed out, "The everyday experience of public space obliges us not to separate between *traffic space* and

<sup>1</sup> This online document titled *Les nouvelles tendances du mobilier urbain* is available at <a href="http://www.sinoconcept.fr/nouvelles-tendances-mobilier-urbain">http://www.sinoconcept.fr/nouvelles-tendances-mobilier-urbain</a> (only French), author unknown. The present translation into English is my own. The original document was available on the now shut down website of the corporate foundation named "Le temps des villes", a private foundation created 1 May 2007 and closed 8 December 2012 (<a href="http://www.centre-francais-fondations.org/annuaire-des-fondations/993">http://www.centre-francais-fondations.org/annuaire-des-fondations/993</a>), belonging to Mr. François Rivière, French politician and businessman who used to manage several leading European car parking operators: SEREP, Epolis and Epolia, the latter a subsidiary of Eiffage, then Charterhouse and now Q-park (<a href="http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_">http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_"http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_"http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_"http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_"http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_"http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivi%C3%A8re\_"http://fr.wikipedia.org/wiki/Fran%C3%A7ois\_Rivimance\_Rivimance\_Ri

communication space" (quoted in: Paquot 2009: 8; my on translation). Public spaces "fulfill an essential function of collective life: communication" (ibid: 5; my own translation). Therefore, the communication, or rather, the mediation value of urban public space needs to be emphasised over its traffic value, without drawing them apart though.

#### Provo's political-artistic interventions

The third indication sends us back to the genesis of BS, to the "failed" Amsterdam's "white bikes" of summer 1965.2 Most authors do mention this episode in their analyses, but none regrettably appreciate either its socio-historical context or the intentionality behind the action. In fact, it is strongly arguable that these "white bikes" were intended to become a reliable means of transport. If one is consistent with the instigator's action rationale, it is to believe that Provo's Witte Fietsen Plan was instead conceived and realised as an artistic theatrical performance act. Indeed, existing from 1965 to 1967 and influenced by Marxism, Situationism and Dadaism, "Provo was an anarchist youth movement in Amsterdam that provoked lawful authorities, the monarchy, and 'the mindless masses' in a playful and imaginative way".<sup>3</sup> Provo's important personalities were among others Robert Jasper Grootveld (1932-2009), a former window cleaner, performance artist and "anti-smoking sorcerer", Roel van Duijn (1943-), a philosopher and politician, Luud Schimmelpennink (1935-), an engineer and industrial designer, and Constant Nieuwenhuys (1920-2005), a multi-talented artist and architect founder and member of the Experimentele Groep in Holland and CoBrA. "Provos used provocative direct action ('pranks' and 'happenings') to arouse society from political and social

<sup>1 &</sup>quot;Qu'est-ce que la communication au sens large du terme? C'est « être en relation avec » (communicare), cela sous-entend un échange quelconque de signes, peut-être même un déplacement, à coup sûr un transport réel ou symbolique. La communication facilite la circulation indispensable au commerce (des sentiments, des idées et impressions comme des marchandises, des capitaux et des gens...). Le déplacement réclame des voies de communication, tout comme la transmission des messages a besoin de supports, de codes et d'émetteurs et de récepteurs." (Paquot 2009: 4).

<sup>2</sup> See section "2.2. Delimiting the research object".

<sup>3</sup> Margreet Schrevel, Provo Provokes, International Institute of Social History, available at <a href="http://www.iisg.nl/collections/provo/intro.php">http://www.iisg.nl/collections/provo/intro.php</a>.

indifference". They performed happenings and be-ins in selected sites of Amsterdam's public space and "were the first to combine nonviolence and absurd humor to provoke social change" (Voeten 1990). Thus, "[m]any Provo activities were concentrated on solving the problem of making Amsterdam more liveable. Their plans were called 'white plans'" (Zeman: 1998: 7) and addressed dominant development trends of Dutch urban society: "conservatism and rigidity in public life" (ibid: 9), consumerism, car-oriented planning and land speculation. In sum, even though the "white bikes plan" failed as a serious mode of transport, Provo's actions succeeded in another way. Indeed, "the ideas of Provo influenced Dutch public life in an appreciable amount" (ibid: 11). Eventually, "Provo had strong influence on policy life in the Netherlands" (ibid: 9). By their method of intervention, Provo envisioned social and political change as a cultural form of aesthetic praxis. They put in practice ritualised events integrating fellow citizens, police, political authority and media in a community of affect and emotion, thereby altering the perception of reality of its members via peculiar aesthetic experiences.



Fig.13 & 14: Provo members promoting their white bikes

#### Otto Wagner's infrastructural Gesamtkunstwerk

The fourth token submits the evidence that urban transport infrastructure can be conceived from the start for the purpose of

<sup>1</sup> See <a href="http://www.bl.uk/learning/histcitizen/21cc/counterculture/assaultonculture/provo/provo.html">http://www.bl.uk/learning/histcitizen/21cc/counterculture/assaultonculture/provo/provo.html</a>>.

cultural production and expression.<sup>1</sup> For instance, when, along industrialisation, for the same journey horse-drawn carriages were replaced by trains, passengers did get a very different aesthetic experience and thereby perception of being in movement and of relation with the environment. Already Otto Wagner (1841-1918), the well-known fin-de-siècle Austrian architect and chief planner of the Wiener Stadtbahn,<sup>2</sup> envisioned the Vienna Metropolitan Railway as a total work of art, "a Gesamtkunstwerk of constructional technology, a synthesis of the arts that added new accents to the cityscape". Indeed, "for the first time a mass transportation system was subject to a comprehensive aesthetic programme. Engineering structures were not merely decorated but designed down to the last detail. To this day Wagner's viaducts, bridges and station buildings characterise the urban environment like no other major construction project. For Wagner, travelling on the Stadtbahn was an aesthetic experience. He created an architecture of movement and speed that also expressed the contemporary experience of an accelerated 'modern life'".4

#### A "culture of new urban aesthetic"

Last but not least, and somehow in response to Wagner's idea, one of the findings of Laurence Sailliez's master thesis states that "BSSs play a role in the planning and design of streets and therefore urban landscape. Moreover [...] this service offers urban dwellers new opportunities to conquer the city. It also makes possible to freely move through urban space and thus discovering the city" (2010: 21; my own translation), thereby providing a new experience of the city.

<sup>1</sup> This position was the object of the research symposium "Aesthetics of Transport", which took place February 11th 2011 at Brown University <a href="http://www.brown.edu/Departments/MCM/AestheticsofTransportSymposium.html">http://www.brown.edu/Departments/MCM/AestheticsofTransportSymposium.html</a>>.

<sup>2</sup> The Wiener Stadbahn was built 1893-1901, opened to public 1898 and operated until 1989 before being conversed into the currently running Viennese suburban and subway rail networks.

<sup>3</sup> Wien Museum, Otto Wagner Pavillon Karlsplatz <a href="http://www.wienmuseum.at/en/locations/location-detail/otto-wagner-pavillon-karlsplatz.html">http://www.wienmuseum.at/en/locations/location-detail/otto-wagner-pavillon-karlsplatz.html</a>>.

<sup>4</sup> Quoted from the exhibition panel titled "Die Bahnfahrt als ästhetisches Erlebnis / The Train Ride as Aesthetic Experience" located in Otto Wagner Hofpavillon Hietzing, part of Wien Museum. Visited on 23rd June 2014.

In a decisive manner, she concludes that "in Brussels as well as in Paris, the setting up of a BSS is part of the culture of a new urban aesthetic" (ibid: 54; my own translation).

Finally, by moving the lens from the question of mobility to that of public space, BSSs can be interpreted as an advertising innovation using UPS as medium and technics borrowed from interventional arts to aesthetically promote via the provision of an experience the new urban culture of sustainability. Here, whilst experience is equivalent of the German "wahrgenommenes Ereignis" or "Erlebnis" in which an "experience" is perceived via human sensors and then "processed" by body and mind,<sup>1</sup> "[c]ulture 'refers to the social construction, articulation and reception of meaning".<sup>2</sup> Thus, following this re-interpretation we discover that what is at stake with BSSs is not transportation, but perception, in particular perception of presence and movement in UPS, i.e. redefining the culture of UPS' usage.

Then, to connect with the previous section, I suggest that if BSSs has transformative effects it might rather alter the perception of the "sustainable city" than clean up air pollution and relieve traffic congestion. Out of this, critical questions with a political perspective arise. Can perception be artificially created? Influenced? If yes, why should it be? What would be the interests and advantages of producing and managing perception of urban space and life? To what extent is perception a field of human sensory, emotional and cognitive experience invested by urbanistic intervention for promotional action (whether political or commercial, etc.)?

<sup>1</sup> Experiences as "Erlebnisse" are "[m]iteinander verknüpfte subjektive Prozesse (in den beiden das Subjekt konstituierenden Systemen von Körpern und Bewusstsein). Oft, aber nicht notwendig, sind Erlebnisse ihrerseits mit Komponenten der Situation verknüpft. Erlebnisse sind gleichzeitig subjektbestimmt (d.h. abhängig von der singulären psychophysischen Strukturen des Erlebenden) und unwillkürlich, auch wenn die Menschen Erlbenissteuerung durch Manipulation der Situation versuchen. Durch Reflexion werden Ursprungserlebnisse angeeignet und in Reflexionserlebnisse verwandelt. In beiden Erlebnisformen mischen sich singuläre und gemeinsame Komponenten. Im Alltagsleben dominiert die Eindruckstheorie des Erlebnisses, welche die Entstehung des Erlebnisses hauptsächlich im situative gegebenen Material verankert. Angemessener ist die Verarbeitungstheorie des Erlebnisses, die den Aspekt der subjektiven Gestaltung des Materials betont. Erlebnisses sind ein Aspekt des Subjektseins. Insofern ist die Formulierung, ein Subjekt habe Erlebnisse, irreführend, Das Subjekt besteht (teilweise) in Erlebnissen" (Gerhard Schulze, Die Erlebnisgesellschaft: Kultursoziologie der Gegenwart, Frankfurt/Main: Campus Verlag, 2005, 2. Auflage, Glossar, "Erlebnis", p. 559).

From Held et al. 1999:38, quoted in: David Marsh and Gerry Stoker (eds.), Theory and Methods in Political Science, London: Palgrave MacMillan, 2nd edition, 2002, pp. 73-74.

# 2.6. Positioning the master thesis

Since the transportation effects of BSSs do not transform urban environments into "sustainable cities", and drawing from the other insights gained above, this section settles the research object and thereby the master thesis in the problematic of the agency of cultural and artistic practices in regards to social, political and spatial transformations. To that end, I first propose an accurate concept from social theory to think about effects and change, then briefly review the historical conditions that led arts to become a transformational actor, and finally mention the appropriation of these elements in urban planning and design thoughts and practice.

#### Performativity and agency

How to think first about change and the constitution of reality outside of the unsatisfactory positivism of transportation and management causal analyses on BSSs? "[W]ithin the social sciences [...] performativity has become a way to think about 'effects', in particular, to supply an alternative to causal frameworks for thinking about effects" (Butler 2010: 147). "[P]erformativity seeks to counter a certain kind of positivism according to which we might begin with already delimited understandings of what [categories, for instance of] gender, the state, and the economy are. Secondly, performativity works, when it works, to counter a certain metaphysical presumption about culturally constructed categories and to draw our attention to the diverse mechanisms of that construction. Thirdly, performativity starts to describe a set of processes that produce ontological effects, that is, that work to bring into being certain kinds of realities or, fourthly, that lead to certain kinds of socially binding consequences" (ibid). Thus, "theories of performativity can be employed to naturalize or subvert the sovereignty of political authority; to depoliticize or repoliticize the body as a locus of corporeal subjectivities; and to reinforce or call into question the taken-for-grantedness of social conventions and the spaces of everyday life" (Glass & Rose-Redwood 2014: 2), as with the BS phenomenon' sustainable transport assertion.

Briefly, the academic notion of performativity originally stems on the one hand from John L. Austin's 'speech-acts', or when saying is doing, and on the other from Judith Butler's 'bodily acts', or when embodying is doing.¹ Basically, "[a] process or an act is performative when it is self-referential and generates a new reality".² "[P]erformativity must be understood not as a singular or deliberate "act", but as the reiterative and citational practices by which discourse produces the effects that it names" (Butler 1993: 2, quoted in Glass & Rose-Redwood 2014: 1). Performativity "incorporates important material and discursive, social and scientific, human and nonhuman, and natural and cultural factors" (Barad 2003: 808) in relational "iterative intra-activity" (ibid: 828). It is a material-discursive force doing reality.

Concretely, in order to be assessed as successful and therefore to have effects, performative actions must meet certain felicitous conditions. "A performative utterance always addresses a community, represented by the people present in a given situation – it can therefore be regarded as the performance of a social act. (Fischer-Lichte 2008: 25). To make reality happen, therefore, the performative act must (i) reiterate selfreferential citations performed in ways of uttering (as for Austin's 'speech act') and ways of embodying (as for Butler's 'bodily act'), (ii) be enacted in co-presence of different participants (e.g. speaker or doer and audience), (iii) simultaneous production and reception of the act, (iv) taking place in an accurate social, institutional and spatial framework. Furthermore, the success of a performative act in constituting reality is only provisional, as long as the mechanisms are functioning under the set of felicitous conditions, "yet many nevertheless acquire the aura of permanence and stability by means of what Judith Butler calls the "ritualized repetition of norms" (1993: x). If [...] norms must be continuously reiterated in order to be sustained, these regulatory practices can be seen as performative to the extent that they succeed at bringing onto being the very effect that they proclaim." (Glass & Rose-Redwood 2014: 1-2).

<sup>1</sup> See John Langshaw Austin, How to Do Things with Words: The William James Lectures delivered at Harvard University in 1955, 1962, and Judith Butler, "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory", in Sue-Ellen Case (ed.), Performing Feminisms: Feminist Critical Theory, Baltimore: Johns Hopkins University Press, 1990, 270-82.

<sup>2</sup> Lecture of Erika Fischer-Lichte at the Symposium "Performative Urbanism. Generating and designing urban space" organised by the Chair for Urban Design and Regional Planning of Munich University of Technology and held in the Pinakothek der Moderne, Munich, 19-20 July 2013. Available at <a href="http://vimeo.com/76187258">http://vimeo.com/76187258</a>.

In echo to our cultural concern towards BS, Bial explains that "much of what we call culture is in fact performance. A community's performances reflect and embody its values, beliefs, and traditions. Moreover, the concept of performativity suggests that performance can also define and shape those values and beliefs." (2007: 321). In this way, social representations and ontologies like for instance the "state", "social classes", the "market", "identity", "space", "masculinity", "poverty", "art" or even "urban sustainable mobility" are thus both materially and discursively performed. "[H]ow we describe the field has something to do with how the field finally looks and what we take it to be" (Butler 2010: 148). "When theorists depict patriarchy, or racism, or compulsory heterosexuality, or capitalist hegemony they are not only delineating a formation they hope to see destabilized or replaced. They are also generating a representation of the social world and endowing it with performative force. To the extent that this representation becomes influential it may contribute to the hegemony of a "hegemonic formation"; and it will undoubtedly influence people's ideas about the possibilities of difference and change, including the potential for successful political interventions" (Gibson-Graham 1996: x). Finally, for Butler, performative formulas "offers fictions that want to bring about "realities"" (Meijer & Prins 1998: 276). They "are fictive, in the sense that they delineate modes of possibility" (Butler, in ibid: 277).

Eventually, the definition of BSSs as "urban sustainable mobility" can also be seen as a performative formula, a material-discursive fiction reiterating what it refers to. Indeed, Tironi proposes that "the dispositif Vélib' became successful thanks to the work of description and translation of the "sustainable city" which realised an infrastructure making materially visible (thousands of bikes scattered throughout the city for one Euro per half-hour) the dream of a sustainable urban development for the City of Paris" (2011: 17; my own translation).

#### Art and change

Secondly, let us see now how artistic practices relate to change. "The category of art has been constructed differently at different times and places, and within different cultural, social and political systems" (Bradley 2007: 9). Along history, the social role of arts had various positions to authority, whether serving cultural domination, opposing hegemonic power or just keeping distance with any sort of political engagement. In the West, after the *Ancien Régime*'s court artist

serving aristocracy, the establishment by industrial-capitalist modernity of the art-gallery system—a space invented by the bourgeois class "for the presentation and enjoyment of art" (ibid)—and the ideology of the "autonomy of art" (i.e. "l'art pour l'art") ensured a depoliticised practice and "conception of art as an activity separated from the rest of social life" (ibid.), yet "dependent upon the perpetuation of existing economic conditions and social relationships, [thereby] serv[ing] conservative social and political forces" (ibid: 10). However, the opposite tendency, in search "to participate meaningfully in social struggles" (ibid) and paramount in the 1960s-70s, seriously challenged the arts' position which shifted from "isolationism" to "interventionism". Instead of reproducing the bourgeois society, their former patrons, critical and radical artists "looked beyond the gallery system to ally themselves with wider social movements" (ibid), ideologically invoking "the idea of art itself [...] as representing [...] an ideal of personal liberty, a utopian condition to which society might aspire, or a common right to participate in the creation of everyday culture" (ibid: 11), and technically using striking artistic innovations. Correspondingly, "interventionist" artists dedicated to urban issues have aimed at "the purposeful intervention into the production and distribution of urban space" (Laister 2014: 12).

However, "the relative defeat of the 1968 uprisings in Europe and the US, and the largely successful taming of the anti-colonial revolutions elsewhere led to a loss of faith in the possibility of dramatic social transformation" (Bradley 2007: 20). Moreover, in the following decades, corporate management discourse fully assimilated the practices and values of the anti-establishment 1968 'artistic critic' to the needs of contemporary capitalistic productivity and wider processes of social reproduction.1 Indeed, Vincent Pieterse identified a "complete turnaround of the perception of the homo ludens, from being viewed as subversive, destructive and a challenge to societal productivity, to being the focal point in an emerging management literature for which the creative man is the central source of management" (2011: 18). This discursive reversal—'from artist-as-leader to leader-as-artist'—has led to the establishment of the figures of the 1950s avant-garde artist and 1960s counter-culture activist as contemporary images of authority and models of leadership. Consequently, "to produce change and promote

<sup>1</sup> See Luc Boltanski and Ève Chiapello, The New Spirit of Capitalism (Verso, 2007).

innovation and development" (ibid: 16),<sup>1</sup> the contemporary leader/manager/artist/activist must not only be charismatic, visionary, intuitive, mobile, creative, cooperative, open to taking risks and strong at networking, but, in addition to these disciplinary attitudes, s/he embodies essential values of the figure of the artist and the activist, that is self-actualization, freedom, authenticity and knowledge deriving from personal experience, so Pieterse.

In the end, activist art practices "have often contributed to the methods and vocabulary of modern social movement. Some tactics or technologies, such as photomontage or protest-performance [in public spacel, have been widely adopted and remained in use for decades" (Bradley 2007: 10). In the 1960s-70s, the method of the happening (today mostly named performance, theatre performance or performance act) was extensively used for "the enactment of new social relationships under the utopian sign of art" (ibid: 18).<sup>2</sup> The happenings or events organised by Provo (1965-1967) in Amsterdam and the Diggers (1966-1968) in San Francisco perfectly illustrate the idea of politicised performance art at the service of social change. "The sociologist Immanuel Wallerstein has argued that the events of this era [...] signalled a fundamental shift in the way social movements conceived of this transformation taking place. He identifies a shift from a belief in vanguardist forms of organisation that looked to take power to the idea that a movement's form of organisation should reflect the non-hierarchical structure of the imagined society to come" (ibid: 20-1). In other words, a performative form of action.

#### Situational-performative urbanism

Thirdly, in recent years, in order to find intervention solutions to mitigate errors and negative effects of modernist city Baukultur, these intellectual and artistic innovations have been appropriated in the field of urban development. On the side of spatial experts, drawing among others from the International Situationist movement, Henri Lefebyre,

<sup>1 &</sup>quot;If we want things to stay as they are, things will have to change." (spoken by Tancredi, in Giuseppe Tomasi di Lampedusa's 1958 book The Leopard).

<sup>2 &</sup>quot;A happening is a performance, event or situation meant to be considered art, usually as performance art. Happenings occur anywhere and are often multidisciplinary, with a nonlinear narrative and the active participation of the audience. Key elements of the happening are planned but artists sometime retain room for improvisation" ("Happening", in: Wikipedia, The Free Encyclopedia, available at <a href="https://en.wikipedia.org/wiki/Happening">https://en.wikipedia.org/wiki/Happening</a>).

Michel de Certeau, psycho-geography and psychosocial production of space, some architectural theorists and urban planning and design practitioners have shown a "current interest in walking and travelling, physical recognition and lived space, cultural production of space" (Nerdinger & Wolfrum 2008: 153). For them, "[s]pace is [...] a medium made of lived social relations, a media by which people shape their own concrete life in interaction with other bodies" (Wolfrum 2008: 116; my own translation). They have been developing situationalperformative solutions to tackle urban issues whose aim is not to trigger change on a macro level, I would say, but to act upon the individual perception of cities' dwellers. "One can act in the city by means of artistic documentation and interpretation [...] Performative actions are becoming part of urbanistic strategies. They use temporary installations as interventionistic acupuncture, temporary actions, recalling space in the cultural memory of urban societies, and performances to describe places" (ibid: 116; my own translation). This urbanistic program posits as primary paradigm "the sensuous experience of urban space" (ibid. 2010: 1; my own translation). "Besides walking, performative urbanism puts in its central focus all forms of movement and experience" (ibid. 2008: 115; my own translation). Finally, performative actions nevertheless participate to the construction of reality. Its transformative power is sum up with this sentence: "Another body-performance makes another city" (ibid; my own translation).

On the side of political authority, artistic and cultural activities have also been seized by the management of urban policies and their governance. In the context of post-fordist economic restructuring, leading urban development policy trends have been to a large extent influenced by 'entrepreneurialism' on the one hand, and the promotion of so-called "creative industries" on the other hand.<sup>2</sup> As a result, "a new rhetoric has entered city planning. One does not act anymore as

<sup>1</sup> See for instance the Symposium "Performative Urbanism. Generating and designing urban space" organised by Prof. Sophie Wolfrum, Chair of Urban Design and Regional Planning at Munich University of Technology, and held in Munich at the Pinakothek der Moderne 19th-20th July 2013, <a href="http://www.stb.ar.tum.de/index.php?id=31">http://www.stb.ar.tum.de/index.php?id=31</a>. See also the N°183 (2007) of the German architecture magazine ARCH +: "Situativer Urbanismus".

<sup>2</sup> For 'entrepreneurialism' see David Harvey, "From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism", in *Geografiska Annaler* B., 1989, 71(1), 3-17. For the promotion of urban creative industries see Richard Florida, *The Rise of the Creative Class. And How It's Transforming Work, Leisure and Everyday Life* (Basic Books, 2002),

the power controlling urban "reevaluation" top-down but also as a mediating, socially activating, and identity-establishing authority interested in local expertise. [...] [N]ew alliances result from this" (Laister 2014: 12). Indeed, the current mode of urban intervention, based on the coalition of interests between different actors, when emphasising artistic and cultural actions calls on "more and more alliances between art and municipality in times of shrinking cultural budgets and rising demands from the part of the creative industries" (ibid: 18).

# 2.7. Formulating the research question and the hypothesis

BS is a fascinating urban phenomenon that has unfortunately never really yet been interrogated. Indeed, how do you explain that it was invented in the radical 1960s in a very specific local situation to promote alternative non-polluting ways of urban transportation, but that the almost only operationally successful schemes were entirely implemented starting from the globalising 2000s as electronic product-services listed in the street furniture catalogue of multinational companies of the OoH media industry? I suggest this is because the former belonged to a marginal form of counter-culture protest—this would explain why official political and economic support were absent —whereas the latter has appropriated these methods into mainstream advertising techniques.

#### Research question

Therefore, based on the knowledge gained in the previous sections, I can now ask my research question: to what extent does BS promote urban sustainable mobility?

<sup>1</sup> See the paragraphs about the political effects of the implementation of a BSS in the literature review (section 2.3.).

#### Hypothesis

To understand how BS promotes the new urban culture of sustainability, I propose as hypothesis that the infrastructural urban interventions Citybike and Vélib' make sense of the discourse of "urban sustainable mobility" by providing an aesthetic experience where the presence of BS stations and the movement of BS bikes in UPS perform the aestheticised social representations and cultural values of mobility and the environment. Thus, using BS bikes according to the terms and conditions of the service implies embodying—i.e. bringing to life—the referential four paradigms which compose the BS phenomenon, thereby doing "urban sustainable mobility" and transforming the perception of the relation between sustainability and the city.

## 2.8. Research design

#### Methodology

This master thesis consists of a critical analysis and interpretation of the urban phenomenon BS. It follows the qualitative paradigm of urban and social research and applies an hermeneutic process of inference. The research object and the problematisation are not pre-given; they have emerged along the research process. An intensive conceptual work is undertaken in order to move the epistemology from the realm of transportation to categories of economic-cultural practice and aesthetics put in a spatial and political perspective.

The choice of Paris and Vienna as empirical case studies can be justified as follow: Vienna is one the "4Cities" cities, it was also my place of residence during the research and writing, and finally the city is equipped with one of the oldest still running 3<sup>rd</sup> generation BSSs in the world. On the other, beyond being my hometown, Paris serves as a landmark in the BS world since its scheme triggered the global breakthrough of and attention to the phenomenon. Even though both Paris and Vienna use the same BS system, that of JCDecaux Cyclocity, both cities and services are also different enough so that their comparison can help nuance the outcome of the research question and hypothesis.

#### Materials

While content analysis of secondary materials represents a major part of the techniques employed, several phases of observation in Vienna and Paris were also carried out as well as six semi-structured interviews were conducted with experts, three in each city, in order to collect primary data. The academic origin of the sources varies: sociology, geography, political science, anthropology, architecture theory, theatre studies, philosophy and history.

#### Structure

The master thesis is structured in five chapters. The first -"Introduction"-is similar to a preface and introduced the research on a subjective tone recalling how this research came about. The second—"Setting the bike-sharing phenomenon"—grounds the epistemological shift and therefore is a crucial step in the scientific demonstration. The third—"Re-framing the phenomenon of bikesharing"—develops the answer to the research question according to the orientation given by the hypothesis. It is divided in two sections: while the first investigates the political dimension of aesthetic experience and perception on a theoretical level, the second examines more precisely the conditions enabling the experience provided by BSSs. The fourth chapter is the comparison of the case studies where empirical elements of first aestheticisation in UPS and then Citybike and Vélib' as performance and installation art are identified in order to evaluate the hypothesis. Finally, the fifth chapter concludes the research and opens up to further political and urbanistic perspectives.

#### Limits

The master thesis has its own limits. It does not decide whether BSSs can be considered as art. The epistemological shift is a matter of personal choice, therefore it does not pretend for unique truth, only for the interpretation of reality. Besides, the analysis does not provide an actual account on the transformative effects of BSSs on perception. This could be the object of a further research.

# RE-FRAMING PHENOMENON OF BIKE -SHARING

# **3.1.** The politics of aesthetic, experience and perception

In order to understand the political dimension within the experiential and perceptional service provided by BSSs, this section will first see how social theory relates aesthetics and politics to each other, then move on to the mechanisms and phenomena involved in aesthetic experience and perception, and finally highlight the extent to which feelings and emotion, prime output of aesthetic experience and perception, are themselves partaking to important political processes.

#### 3.1.1. Aesthetics and politics

In this master thesis, for the understanding of the human activity of sensory appreciation named by the term "aesthetics" and its relationship to "politics", designating the activity of organizing social life, I will follow the French philosopher Jacques Rancière. "[A]esthetics

can be understood [...] as the system of a priori forms determining what presents itself to sense experience. It is a delimitation of spaces and times, of the visible and the invisible, of speech and noise, that simultaneously determines the place and the stakes of politics as a form of experience. Politics revolves around what is seen and what can be said about it, around who has the ability to see and the talent to speak, around the properties of spaces and the possibilities of time" (Rancière 2004: 13).

#### The distribution of the sensible

More precisely, "aesthetics refers to the distribution of the sensible that determines a mode of articulation between forms of action, production, perception, and thought. This general definition extends aesthetics beyond the strict realm of art to include the conceptual coordinates and modes of visibility operative in the political domain" (Rancière 2004: 82, Appendix, Glossary of Technical Terms, "Aesthetics"). Thus, on the one hand "[p]olitics is aesthetic in a broad sense insofar as it is concerned with the "sensible" distributions that constitute social hierarchies, and [on the other] aesthetics is political in the sense that historically important conceptions of the nature of art and of the role of the artist [...] determine distributions of the sensible in the artistic domain and lend insight into the distributions that characterize larger society". Therefore, politics and aesthetics are not alien to each other. If anything, they are fundamentally entwined.

Furthermore, for Rancière, the 'distribution of the sensible' "refers to the implicit law governing the sensible order that parcels out places and forms of participation in a common world by first establishing the modes of perception within which these are inscribed. The distribution of the sensible thus produces a system of self-evident facts of perception based on the set horizons and modalities of what is visible and audible as well as what can be said, thought, made, or done. Strictly speaking, 'distribution' therefore refers both to forms of inclusions and to forms of exclusion. The 'sensible', of course, does not refer to what shows good sense or judgement but to what is aisthêton or capable of being apprehended by the senses"

<sup>1 &</sup>quot;Jacques Rancière." Encyclopaedia Britannica. Encyclopaedia Britannica Online Academic Edition. Encyclopaedia Britannica Inc., 2014. Web. 14 Jul. 2014. <a href="http://www.britannica.com/Ebchecked/topic/1805362/Jacques-Ranciere">http://www.britannica.com/Ebchecked/topic/1805362/Jacques-Ranciere</a>.

(Rancière 2004: 85, Appendix, Glossary of Technical Terms, "Distribution of the Sensible").

#### Aesthetic engagement

The particular 'distribution of the sensible' that governs the aesthetic experience in the context of the BS phenomenon is that of 'aesthetic engagement', a concept offered by American philosopher Arnold Berleant, who opposes the Kantian 'aesthetic disinterestedness' of contemplative and distanced attitude of the audience towards the art object. For Berleant, "[a]esthetic engagement rejects the dualism inherent in traditional accounts of aesthetic appreciation and epitomized in Kantian aesthetics, which treats aesthetic experience as the subjective appreciation of a beautiful object. Instead, aesthetic engagement emphasizes the holistic, contextual character of aesthetic appreciation. Aesthetic engagement involves active participation in the appreciative process, sometimes by overt physical action but always by creative perceptual involvement. Aesthetic engagement also returns aesthetics to its etymological origins by stressing the primacy of sense perception, of sensible experience. Perception itself is reconfigured to recognize the mutual activity of all the sense modalities, including kinesthetic and somatic sensibility more generally" (2013). Furthermore, "[i]t rejects the traditional separations between the appreciator and the art object, as well as between the artist and the performer and the audience. It recognizes that all these functions overlap and merge within the aesthetic field, the context of appreciation. The customary separations and oppositions between the functions of artist, object, appreciator, and performer disappear in the reciprocity and continuity of appreciative experience" (ibid). "Aesthetic engagement recognizes that beauty, or aesthetic value more generally, inheres not in the object or in the perceiver but is rather the leading feature of the reciprocal process of perceptual participation between appreciator and object" (ibid). Eventually, "[a]esthetic engagement has a transformative effect" (ibid), i.e. act politically.

#### Artistic and aesthetic practices

In addition, Rancière defines artistic practices as "ways of doing and making' that intervene in the general distribution of ways of doing and making as well as in the relationships they maintain to modes of being

and forms of visibility" (2004: 13), and aesthetic practices as the "forms of visibility that disclose artistic practices, the place they occupy, what they 'do' or 'make' from the standpoint of what is common to the community" (ibid.). The latter constitute "configurations of experience that create new modes of sense perception and induce novel forms of political subjectivity" (ibid: 9). Eventually, together, "[p]olitics and art, like forms of knowledge, construct 'fictions', that is to say *material* rearrangements of signs and images, relationships between what is seen and what is said, between what is done and what can be done." (ibid: 39).

#### Fictions and fictionalism

Indeed, the practice of fiction counts for an artistic and aesthetic source of imagination that provides advises for conduct in real life. In its 1911 Philosophy of 'As If', German philosopher Hans Veihinger (1852-1933) "argued that the self-reflexive character of modernity resulted in traditional beliefs being replaced by provisional fictions, which provided practical guidance as well as spiritual enchantments. Vaihinger's Fictionalism was a form of disenchanted enchantment, in which both belief and disbelief were held in suspension through the use of an "as if" perspective" (Saler 2013: 4). While "[flictionalism aimed at providing narrative enchantments that delighted without deluding" (ibid: 5), "fictions enabled the revising of the real" (ibid: 6). Furthermore, "[n]ormativity could also emerge through the consensus of interpretive communities devoted to fictional works and worlds" (ibid). Thus, "secular communities devoted to fictional worlds promote fellowship and guidance, and are frequently sustained by their own rites and rituals" (ibid). Finally, fictions and fictionalism, in addition to the performative character of the genre, offers an accurate aesthetic-political answer to understand the cultural function of BSSs.

<sup>1</sup> See subsection 2.6. "Performativity and agency".

## 3.1.2. The mediation power of matter: experience and perception of represented and tangible bodies and objects

How do we react to aesthetic situations, whether with artefacts and/or people? How do our body and mind respond to it? How does the perception of an aesthetic experience, the exposure to sensory content, impact our thoughts, feelings and action? Both complementary to understand the perception-experience-action nexus in artistic representations of emotions and intentions, a 'neuroesthetics' explanation is first given to explicate the 'power of images', followed by an interpretation of the magical power of technological artefacts.

#### Neuroesthetics and the power of images

In biological and neurological terms, perception—i.e. the reception of sensory information¹—leads to bodily (re)action via experience according to the loop-like pattern of the "perception chain" composed by stimulus → transduction → converting → perception, cognition → experience → action → stimulus → and so forth.² In opposition to cognitive and disembodied approaches to art and aesthetics, French philosopher Maurice Merleau-Ponty (1908-1961) reminds us that "[t]he body is always already connected to the world through its "flesh". Any human grasp on the world occurs through the body" (Fischer-Lichte

<sup>1</sup> Sensory information or "[s]enses are physiological capacities of organisms that provide data for perception. [...] Humans have a multitude of senses. Sight (ophtalmocetpion), hearing (audioception), taste (gustaoception), smell (olfacoception), touch (tactioception) are the five traditionally recognized. [...] other stimuli beyond those governed by the traditional senses exists, including temperature (thermoception), kinesthetic sense (proprioception), pain (nociception), balance (equilibrioception), and various internal stimuli". "Although the sense of time is not associated with a specific sensory system, the work of psychologists and neuroscientists indicates that human brains do have a system governing the perception of time" ("Senses", in: Wikipedia <a href="https://en.wikipedia.org/wiki/Senses">https://en.wikipedia.org/wiki/Senses</a>).

<sup>2 &</sup>quot;Die Wahrnehmungskette als Modell der Wahrnehmung beruht auf der Gegenüberstellung von einem Wahrnehmungsapparat und einer Außenwelt. Die Kette besteht aus sechs Gliedern, die jeweils auf ihr Folgeglied Einfluss ausüben und an jeder Art von Wahrnehmung in genau dieser Reihenfolge beteiligt sind. Sie ist in sich geschlossen, d.h. das sechste Glied beeinflusst wiederum das erste Glied der Kette: Reiz → Transduktion, Transformation → Verarbeitung → Wahrnehmung, Bewusstwerdung → Wiedererkennung, Erlebnis → Handeln → Reiz → usw." (<http://de.wikipedia.org/wiki/Wahrnehmung>).

2008: 83). Therefore, before the mind (i.e. cognition), any aesthetic response to either the form of object or the presence and motion of people first occurs through the body. This is why, feelings of physical involvement by the beholder are often induced in the course of the contemplation and exposure to a work of art or image. "These feelings consist of the empathetic understanding of the emotions of represented others or, most strikingly, of a sense of inward imitation of the observed actions of others" (Freedberg & Gallese 2007: 197). "Beholders find themselves automatically simulating the emotional expression, the movement or even the implied movement within the representation" (ibid). Indeed, "a crucial element of esthetic response consists of the activation of embodied mechanisms encompassing the simulation of actions, emotions and corporeal sensation, and that these mechanisms are universal. This basic level of reaction to images is essential to understand the effectiveness both of everyday images and of works of art" (ibid).

Thus, "we understand others via the forms of simulation, most of which are embodied" (Freedberg 2009: §16). Relying on "recent research on mirror and canonical neurons, and the neural underpinnings of empathy and embodiment" (Freedberg & Gallese 2007: 199),¹ art historian David Freedberg and neuroscientist Vittorio Gallese shed light on the brain mechanisms responsible for what the representation of emotions and movement on the one hand and the artist's gesture and intention on the other hand in works of art and in any other form of aesthetic event make to us:

<sup>1</sup> Mirror neurons are located "in the premotor cortex of the brain—and especially in Brodmann's area 44 in humans, in an area significantly overlapping Broca's area" (Freedberg 2009: §14). "Mirror neurons were first discovered in monkeys, but then mirror networks were discovered in the human brain as well. They provide substantial and in my view convincing evidence for the activation of the premotor cortex, in both monkeys and humans, upon observation of the actions of others. The very same neurons fire in our premotor cortex (the area of the brain that prepares our muscles for movement) as if we were engaged in the same actions as the ones we observe, even if we do not execute those actions ourselves" (ibid).

embodied simulation driven by automatic empathetic contagion provoking a "felt sense of imitation" (Freedberg 2009: §27).1

#### Enchantment and the power of artefacts

Designed and manufactured technical artefacts, or objects, even those artistically made, are not the passive items we are ready to believe. Indeed, based on the postulate that "[a]rt production and the production of social relations are linked by a fundamental homology" (Gell 1992: 57), British social anthropologist Alfred Gell (1945-1997) proposes that "the work of art is inherently social [...] it is a physical entity which mediates between two beings, and therefore creates a social relation between them, which in turn provides a channel for further social relations and influences." (ibid: 52). "Art objects embody complex intentionalities and mediate social agency" (1998: back cover).

Gell's work questions the social efficacy of the art object "by taking art as a special form of technology" (1998: viii) as well as of instrumental action. "I consider the various arts—painting, sculpture, music, poetry, fiction, and so on—as components of a vast and often unrecognised technical system, essential to the reproduction of human societies, which I will be calling the technology of enchantment" (1992: 43), says Gell. "[E]nchantment stems from the feeling of wonder that arises when we cannot fully explain an occurrence" (Saler 2006: 715). "As a technical system, art is oriented towards the production of the social consequences which ensue from the production of these objects" (ibid: 44). Politically, Gell's 'technology of enchantment' "contributes to securing the acquiescence of individuals in the network on intentionalities in which they are enmeshed" (ibid: 43). Therefore, for him, "art provides one of the technical means whereby individuals are

<sup>1 &</sup>quot;Neuroscientific research has shed light on the ways in which we empathize with others by emphasizing the role of implicit models of others' behaviors and experiences – that is, embodied simulation. Our capacity to pre-rationally make sense of the actions, emotions and sensations of others depends on embodied simulation, a functional mechanism through which the actions, emotions or sensations we see activate our own internal representations of the body states that are associated with these social stimuli, as if we were engaged in a similar action or experiencing a similar emotion or sensation. Activation of the same brain region during first- and third-person experience of actions, emotions and sensations suggests that, as well as explicit cognitive evaluation of social stimuli, there is probably a phylogenetically older mechanism that enables direct experiential understanding of objects and the inner world of others." (Freedberg & Gallese 2007: 198, Box 1).

persuaded of the necessity and desirability of the social order which encompasses them" (ibid: 44). "This view of art, that it is propaganda on behalf of the status quo" (ibid: 43).

Yet, how does this function? "The power of art objects stems form the technical processes they objectively embody: the technology of enchantment is founded on the enchantment of technology. The enchantment of technology is the power that technical processes have of casting a spell over us so that we see the real world in an enchanted form" (ibid: 44). In other words, "the efficacy of art objects [...] is itself the result of the enchantment of technology, the fact that technical processes [...] are construed magically so that, by enchanting us, they make the products of these technical processes seem enchanted vessels of magical power" (ibid: 46). From an anthropological point of view, the magical value of objects is inherent to the technical domain: "[m]agic haunts technical activity like a shadow" (ibid: 59). It fulfils two important function. First, magic makes sense of the uncertainty which is present in any technological production process. "If we consider that the magical attitude is a by-product of uncertainty, we are thereby committed also to the proposition that the magical attitude is a byproduct of the rational pursuit of technical objectives using technical means" (ibid: 57). Second, magic makes it possible to imagine outcome before putting into action the labour necessary for its realisation. "We can see [...] the notion of magic as a means of securing a product without the work-cost that it actually entails [...] Magic is the baseline against which the concept of work as a cost takes shape" (ibid: 58). In semiotic terms, "magic is the negative contour of work, just as, in Saussurean linguistics, the value of a concept (say, 'dog') is a function of the negative contour of the surrounding concepts ('cat', 'wolf', 'master')" (ibid: 59). Finally, "[j]ust as money is the ideal means of exchange, magic is the ideal means of technical production. And just as money values pervade the world of commodities, so that it is impossible to think of an object without thinking at the same time of its market price, so magic, as the ideal technology, pervades the technical domain" (ibid).

Eventually, in support of my critic of technological determinism,<sup>1</sup> the efficacy or enchantment power of the art/technical-object does not lie in any direct impact that it would produce on reality, but lies in the

<sup>1</sup> See section 2.4. "Designating the problem".

association of ideas and beliefs that one can interpret from his/her interaction with the art/technical-object, i.e. what it refers to in terms of its construction and function. Consequently, we can say that BS "achieves its [a]ffect via the enchantment cast by its technical means, the manner of its coming into being, or, rather, the idea which one forms of its coming into being" (Gell 1992: 47). Therefore, The enchantment power or efficacy of BSSs does not reside in the effective achievement of estimated benefits over traffic, pollution, public health, etc., but in its capacity to make one experiences through his/her body and mind the cultural values and social representations with which BS are associated with.

### 3.1.3. The political significance of emotion

"Inasmuch as men are led more by passion than reason, it follows that a multitude comes together, and wishes to be guided, as it were, by one mind, not at the suggestion of reason, but of some common passion"

Spinoza, A Political Treatise.<sup>1</sup>

What does make us move to act? Among other motivational factors,<sup>2</sup> the perception of feelings and emotion definitively affect thinking and behaviour. "Individuals as much as nations today formulate their agendas, memories, and identities in response to values and passions that are increasingly formed through mechanically reproduced images: images from TV and advertising to cinema and the Internet" (Koepnick 1999: 213). "[O]ur actions are largely not informed by calm reflections, convictions, or theoretical assumptions about the nature of our world. Rather, our emotions offer the most decisive motivation for our actions" (Fischer-Lichte 2008: 154). Yet, why are feelings and emotion

<sup>1</sup> Benedict de Spinoza, A Theologico-Political Treatise and A Political Treatise (Dover Publications, 2004 [1677]), Ch. VI, §1.

<sup>2 &</sup>quot;The motivations that shape our goals and choices are never all entirely conscious" (Jasper 2006: 168). "We are conscious of some motives but not others. Some well up from inside us, others arise outside us. Freud was the master of unconscious, internal motives, which he labeled drives. Rational choice traditions derived from microeconomics feature internal but conscious motives. Sociological, poststructural, and other more "structural" traditions, in contrast, have focused on motivations that originate outside the individual, in moral, cognitive, linguistic and other social systems" (ibid: 157).

so important in political processes? Because they "are what make us care about the world around us, repelling or attracting us" (Jasper 2006: 160). They are "indispensable instruments for coping with reality" (Ciompi & Endert 2011: 19; my own translation). The physical-bodily-sensitive perception dominates (i.e. is stronger) than the intellectual-abstract perception. Without clear demarcations between each other, a feeling, emotion or affect is generally defined as "a rather short lasting and conscious mind-body sensation" (ibid: 17; my own translation) which "ha[s] the ability to release unforeseen energies activating, or sometimes inhibiting, our thinking and behaviour" (ibid: 20; my on translation).

#### Emotional-affective turn in social sciences

This nervous-hormonal energetic property of our body has always been highly coveted by politicians, advertisers and artists, yet in recent years, the interest in social sciences for these phenomena has significantly risen.<sup>2</sup> Two theses lie at the centre of this attention. First, "in most cases thinking and feeling are inextricably entwined" (Jasper 2006: 160). Against the philosophical tradition of mind-body dualism, "rationality and feeling do not stand in abrupt opposition to each other, but rather remain intertwined with each other in complex ways" (Heidenreich 2012: 9; my own translation). "[T] he ontological and practical separation of reason from passion [...] was the hallmark of modern thought" (Eckstein & Wiemann 2013: 9).<sup>3</sup> Emotions have definitively a

American sociologist James Jasper "distinguish[es] several different categories of feelings that have often been lumped together. They typically operate by different chemical and neurological pathways, persist for different lengths of time, and affect action in different ways" (2006: 160). He identifies five categories, classified in an ascending order regarding their duration and social effect: (i) urges (e.g. hunger, thirst, sexual desire, urinate, defecate, sleep, pain, fatigue, vertigo and nausea), (ii) reflexes (e.g. anger, fear, joy, sadness, disgust, surprise, contempt and shame), (iii) affects (e.g. love, hate, trust, respect, ressentiment and some abiding kinds of fear), (iv) moods (e.g. sadness, elation, nostalgia, anxiety, despair, fatalism, resignation, cynicism, optimism, pessimism, wonder and awe), and (v) moral emotions or sentiments (e.g. shame, pride, compassion, outrage, fairness, complex forms of disgust, fear, or anger). For Luc Ciompi and Elke Endert, affect "ist ein evolutionär (=stammesgeschichtlich) verankerter ganzpeitlicher körperlich-seelischer Zustand von unterschiedlicher Onalität, Daner und Berunsstseinsnähe" (2011: 18).

<sup>2</sup> See Patricia Clough, The Affective Turn: Theorizing the Social, Durham and London: Duke University Press, 2007.

<sup>3</sup> The sentence is quoted from Jacob Schiff, "On the possibilities and Limits of Affective Reason: Thinking and Thoughtlessness in the Work of Hannah Arendt". APSA 2010 annual Meeting Paper. Available at SSRN: <a href="http://ssrn.com/abstract=1643823">http://ssrn.com/abstract=1643823</a>.

cognitive function, "they are indispensable as source of perception and knowledge" (ibid; my own translation). With cognition and moral, emotion is one of the basic component of culture.<sup>1</sup>

Emotions not only tie together body and mind, but also unite our body and our mind to those of others. The second postulate states that, feelings, emotion and affect are not merely neurophysiological phenomena in the individual human body, but they are "culturally and socially constructed, named, experienced, and cognised within and through their context" (Palriwala 2013: 174). Accordingly, emotions can also be historicised, "shaped through learning and acculturation processes. As such, they resemble language" (Heidenreich 2012: 9; my own translation). Indeed, "corporeal aspects of emotions—or kinesic behaviour—constitute an elementary mean of communication between people, which function in an amazing way across cultural boundaries" (Ciompi & Endert 2011: 19; my own translation).

#### Emotions in socio-political processes

As such, feelings, affect and "[e]motions almost form an interface between individuals and collective entities" (Puff 2013: 322; my own translation) and therefore enter in the individual-collective production mechanisms of social reality, both tangible and intangible. When the Provo case demonstrates us that emotion and affect can play a significant and lasting triggering role in social and political transformational processes,<sup>2</sup> Eckstein and Wiemann claim "the

<sup>1 &</sup>quot;As the three basic components of culture, emotions, cognition, and morals (both principles and intuitions) operate in similar ways, with similar methodological challenges: they can be observed in individual or collective expressions, and individuals often diverge from "normal" beliefs and feelings" (Jasper 2006: 160). "Kultur im umfassenden Sinn fundiert nicht nur kognitiv als Medium der Kontingenzbewältigung angesichts einer unübersichtlichen Welt; indem sie Gefühle wie Trauer, Wut, Hass oder Liebe bearbeitet, dient sie auch der emotionalen Welterschließung" (Heidenreich 2011: 10).

<sup>2</sup> See section 2.5.

fundamentally public and political status of feeling" (2013: 9). In fact, emotion and affect partake to the political processes of (i) identification of subjectivities, (ii) articulation of communities, (iii) circulation of representations, and (iv) programming of instruments.

- (i) In the postmodern condition, Dirk Wieman and Lars Eckstein explain that the source of emotions "is now no longer the individual's interiority but the contact zones of intersubjective encounters" (2013: 12). "[I]f sociality ('being with') precedes ontology ('being')" (ibid: 13), then "emotions are [...] prior to the subjectivities they generate" (ibid). The subject comes into existence, i.e. gain identity(ies), only in its relation to the other, through encounters with others. In this relational and non-monadic conception of the subject, "[i]dentity, [...] cannot [...] be seen as the property of a bounded and centered being that reveals itself in history. Instead identity is open, incomplete, multiple, shifting. [...]. Identity is hybridized and nomadic" (Gibson-Graham 1996: 12). Feelings and emotion are "[l]ocated in the contact zones between bodies instead of inside bounded selves, and essentially facilitating the processes of political identification" (Eckstein & Wieman 2013: 17).
- (ii) Feelings and affect "are central to processes of socialisation and community-building" (Puff 2013: 322; my own translation). Indeed, "emotions underlie and push social construction processes at micro and macro levels" (ibid: 324; my own translation). Via sentiments, emotions and passion, people organise their collective life in what Barbara

<sup>1 &</sup>quot;In Westeuropa – und vor allem in Deutschland als Folge manipulativ-emotionaler politischer Inszenierungen im Nationalsozialismus – gilt die Trennung von Politik und Gefühlen als normative Voraussetzung der Demokratie. [...] Vor allem aber sollen politische Entscheidungen auf Information und Informiertheit, also auf Wissen basieren. Wissen und Emotionen etablierten sich in der Politik wie auch in den (Sozial-)Wissenschaften in der Zweiten Hälfte des 20. Jahrhunderts freilich als nicht-vereinbare Gegensätze" (Sauer 2013: 241). "Allerdings scheint die Trennung zwischen demokratischer Politik und Gefühlen im politischen Alltag am Beginn des neuen Jahrtausends zunehmend suspendiert zu werden (ibid: 242). "Die Emotionalisierung von Politik erfolgt besonders in Wahlkämpfen, sind diese doch schon immer Hochzeiten leidenschaftlichen politischen Agierens, in denen mit stets neuen Mitteln und Techniken eine potenzielle WählerInnenschaft mobilisiert werden soll, um so die eigenen Stimmen – vor allem durch Stimmung – zu maximieren. Gefühle gelten als zentrale Ingredienzien von Wahlkampagnen – eine Binsenwahrheit, die die politikwissenschaftliche Wählforschung aber erst allmählich zur Kenntnis nimmt" (ibid).

Rosenwein (2002) calls 'emotional communities'. In its essence, the emotional community constitute a proto-polity based on the arbitrary cultivation, domestication, education and articulation of shared 'structure of feelings'. In political theory, the ability to build, sustain and arrange in/excluding communities on the basis of a friend vs. enemy principle is the foundation of any political activity and becomes

<sup>1 &</sup>quot;People lived—and live—in what I propose to call "emotional communities." These are precisely the same as social communities—families, neighborhoods, parliaments, guilds, monasteries, parish church memberships—but the researcher looking at them seeks above all to uncover systems of feeling: what these communities (and the individuals within them) define and assess as valuable or harmful to them; the evaluations that they make about others' emotions; the nature of the affective bonds between people that they recognize; and the modes of emotional expression that they expect, encourage, tolerate, and deplore."" I further propose that people move (and moved) continually from one such community to another—from taverns to law courts, say—adjusting their emotional displays and their judgments of weal and woe (with greater and lesser degrees of success) to these different environments. As Lyndal Roper has put it, "competing cultures [may be seen in the] same individual man [or woman]." There are two points here: not only does every society call forth, shape, constrain, and express emotions differently, but even within the same society contradictory values and models, not to mention deviant individuals, find their place." (Rosenwein 2002: 842-3).

<sup>2</sup> Already "[i]n his Nicomachean Ethics, Aristotle confirms this filiative character of the political community as a collective made up of non-monadic political subjects who are affectively cathexed to others in the medium of friendship" (Eckstein & Wiemann 2013: 13). In detail, "[w]elded together by political passion into the compound subject of Hobbes' (authoritarian) 'Artifical Man' or Gramsci's (insurrectionist) 'collective man', erstwhile individuals are translated into something they were not before their insertion into the new 'unity' [...]. The very process of articulation, fuelled and driven by passion, engenders a transformation of the particles involved. [...] In this process of insertion into the pattern, the 'element' becomes something it was not before: a 'moment' of that structure" (Eckstein & Wiemann 2013: 16). Furthermore, "the forging of political groups and coalitions consists primarily of a "collective form of identification" which is not "a matter of establishing a mere alliance between given interests but of actually modifying the very identities of these forces" (Mouffe 2005: 70). The social agent is again conceived "not as a unitary subject but as the articulation of an ensemble of subject positions" (ibid. 71), for "in the filed of politics, it is groups and collective identities that we encounter, not isolated individuals" (ibid. 140). Political articulation, through which 'elements' integrate as 'moments' of a structured pattern, are decisively contingent on "the predominant role of passions as moving forces" (ibid.), the "affective dimension which is central to the constitution of collective forms of identification, identifications without which it is impossible to grasp the construction of political identities" (Mouffe 2008: 97)" (Eckstein & Wiemann 2013: 16-7).

"the principal definition of politics as the making of 'compound subjects'" (Eckstein & Wiemann 2013: 15).1

- (iii) To become intelligible and circulate across political subjectivities, feelings and passions need to be transformed into language and text. Emotions "get modified and are 'given shape' in the process of their symbolisation in language. [...] [A]s social phenomena or events [, they] can be conceived as the product of the 'sociolinguistic fixing of the quality of an experience [...] into narrativizable action reaction circuits, into function and meaning" (Eckstein & Wieman 2013: 17).<sup>2</sup> Thus, "people articulate and reflect their emotional life or affectivity via various systems of symbols" (Heidenreich 2012: 10; my own translation) and social representations, which are historically and culturally determined.
- (iv) As Sara Ahmed demonstrated in her book *The Cultural Politics of Emotion* (Edinburgh University Press, 2004), feelings and emotions are not neutral receptacle for human intentions, but are rather politically constructed, controlled and channelled. Birgit Sauer (2013) decidedly claims that emotionality and affectivity are a form of governmentality. Passion, feelings, emotion and affect clearly constitute a (self-)conduct, a political force, a mode of politics or governmental rationality

<sup>1 &</sup>quot;Community can be the basis of political action" (Entry "Community", in: Austin Harrington, Barbara Marschall, Hans-Peter Müller (eds.), Encyclopedia of Social Theory, London: Routledge, 2006). For a conceptual elaboration of the political signification of the notion, see Carl Schmitt, The Concept of the Political, Chicago: University of Chicago Press, 2006 [1927].

<sup>2 &</sup>quot;According to Baruch Spinoza's influential conceptualisation, emotion is a double event that comprises physiological affect ("modifications of the body") and its representation in the mind in the form of the "idea of these modifications" (Spinoza 1993: 83). It is, in other words, simultaneously "a certain state of the body along with a certain mode of thinking" (Hadt and Negri 2004: 108)" (Eckstein & Wiemann 2013: 17). "[E]motions require to be grasped not only as the combination of bodily processes and their attendant 'ideas', for "it is only when the idea of the affection is doubled by an idea of the idea of the affection that it attains the level of conscious reflection" (Massumi 2002: 31). Insofar as "the human mind perceives not only the modifications of the body [affect], but also the ideas of these modifications [emotion]" (Spinoza 1993: 59), the 'idea of the modification' becomes itself available to the perceiving mind as an object of representation, hence an "idea of an idea" (ibid. 58)" (Eckstein & Wiemann 2013: 18). "While the first level (where an affect gets cathexed to an 'idea') pertains to the representation of a bodily phenomenon or process in the individual mind, the second level - the one that relates to the 'idea of idea' - brings up the whole cultural repertoire of evaluating and making sense of that emotion. It is here, at the interstices of external and internalised systems of validation, that particular emotions can be encouraged or criminalised, ennobled or degraded. Nor is the link between the first and the second levels of representation an organic one: the 'idea of the modification' and the 'idea of the idea' are as arbitrary and historically contingent as any other signifying process" (Eckstein & Wiemann 2013: 18-9).

apparent as powerful discourses present in the media, science, political and economic life. This discursive technology reformats, reconfigures, repositions, reinstitutionalises and manages according to a certain 'Gefühlspolitik' (emotion policy) the subjectivities, the conditions as well as the meaning of people's life and work, and the citizen/state relationship.¹ Eckstein & Wiemann (2013) however underline that emotion and affect as instrument are planned and mobilised as much from above (top down or pedagogy) as from below (bottom up or performative). Both directions interdependently coexist with each other.

# 3.2. Political-aesthetic conditions of bikesharing experience

Raising awareness and organising mobilisation on public issues to achieve social change in the context of the modern metropolis and the 'urban society' requires appropriated means of promotion. Why? Because historically the fundamental changes provoked by industrialisation, urbanisation and constant cycles of creative destruction have metamorphosed human sensory environment, deeply disrupted the spatio-temporal experience of being-in-the-world, and as

<sup>&</sup>quot;[D]ie mediale, politische und wissenschaftliche Aufmerksamkeit für Emotionen [ist] ein Symptom und zugleich Motor der aktuellen Transformationen von Politik und Demokratie in westlich-kapitalistischen Gesellschaften. Der neue Gefühlsdiskurs soll das Verhältnis von Demokratie und Gefühl, ja soll die Bedeutung von Gefühlen für die politische Positionierung, aber auch für das Leben und Arbeiten von Menschen neu formatieren. Der neue Gefühlsdiskurs ist Ausdruck und zugleich Movens in einem neuartigen Prozess der Herstellung von politischen Subjekten im Neoliberalismus, neuer Vorstellungen von citizenship, von politischen und sozialen Rechten, also des Verhältnisses von BürgerInnen und Staat. Der Gefühlsdiskurs - verstanden im Foucault'schen Sinne als Rede über Gefühle, als Praxis von Gefühlen sowie als institutionelle Gefühlsarrangement -trägt dazu bei, dass staatsbürgerliche Rechte neu begründet und mithin BürgerInnen in der Demokratie neu situiert werden. In neoliberalen Subjektivierungsformen werden Gefühle als Teil neuer Techniken der »Führung« bzw. der »Regierung« von Menschen (Foucault 2000). Der Gefühlsdiskurs institutionalisiert also neue Machttechniken in den Menschen, nämlich die Unterwerfung unter neue Formen und Erfordernisse der Organisation des Lebens, Zusammenlebens und Arbeitens – also von Staat und Politik – unter neoliberalen Bedingungen" (Sauer 2013: 245).

<sup>&</sup>lt;sup>2</sup> See Henri Lefebvre, The Urban Revolution, Minneapolis: University of Minnesota Press, 2003 [1970].

a consequence seriously challenged individual and collective feelings of identity, belonging and memory, essential cultural elements to build support and compliance to any political community. For German philosopher Walter Benjamin (1892-1940), who was interested in the "manner in which mutations of the urban environment transformed human *sensorium* and in doing so affected the very nature of the modern city dwellers' experience" (Simay 2009: 66, my own translation), "urban phenomena constitutes [...] cases of modernity where one can read the new modes of perception and experience in capitalist societies" (ibid: 65, my own translation).<sup>1</sup>

Thus, the urban phenomenon BS is "a subtle domestication of peculiarly modern structures of seeing, perception, and experience. The organization of auratic sensations in a postauratic culture is at the core of aesthetic politics." (Koepnick 1999: 4-5). In the following subsections, we will first shed light on the process of aestheticisation that conditions to a large extent the experience of BS, especially that articulated around social representations of cultural values of mobility and the environment, then consider this from the point of view of urban public space, and finally see how this actually technically function.

<sup>1 &</sup>quot;Benjamin [...] claim[s] that the fundamental restructuring of temporal and spatial relations in modernity – that is, the adaptation of the human senses to urban traffic and industrial modes of production, to acceleration and sensation – undermines the condition for the possibility of what he now calls auratic experience. Defined as a quasi-magic perception of an object invested "with the capability of returning the gaze" (ILL 188, GS I: 646), aura withers in modernity. Taylorism, industrial mass production, and urbanization render obsolete any spatiotemporal enchantment with a unique phenomenon however close it may be; they displace auratic experience with the modern regimes of distraction. Film, for Benjamin, is both symptom and agent of this transformation. It extends the thrust of social changes to the arenas of cultural exchange and aesthetic expression. Accordingly, the shock of cinematic montage emancipates cultural practices not only from auratic sentiments but from aesthetic experience altogether; it links cultural formulations [...] directly to political projects" (Koepnick 1999: 219).

# **3.2.1.** Processes of aestheticisation and eventalisation

#### Aestheticisation?

"We are without doubt currently experiencing an aesthetics boom. It extends from individual styling, urban design, and the economy through to theory. More and more elements of reality are being aesthetically mantled, and reality as a whole is coming to count increasingly as an aesthetic construction" (Welsch 1996: 1). An assumption also shared by Axel Honneth (1992), and more recently by Lutz Hieber and Stephan Moebius (2011) as well as by Gilles Lipovetsky in his book *L'esthétisation du monde : vivre à l'âge du capitalisme artiste* (Gallimard, 2013). "'Aestheticization' basically means that the unaesthetic is made, or understood to be, aesthetic" (Welsch 1996: 7). Thus, "aestheticisation describes those phenomena of sensual intensification or the sensualisation of artefacts, people, perceptions, experiences and practices [...] which can both be understood as either solution to societal issues or as the creative motor of social processes" (Hieber & Moebius 2011: 8; my own translation).

However, modern phenomena of aestheticisation are not new per se. They were already identified by German sociologist Georg Simmel (1858-1918) who observed how "with the decline of predetermined life goals subjects increasingly learned to focus on their psychological experiences to find milestones for their individual action" (Honneth 1992: 523, my own translation), thereby "shaping daily life according to aesthetic considerations and experiential stipulations" (ibid; my own translation).

Authors usually distinguish between 'surface aestheticisation' and 'deep-seated aestheticisation', both are dependent from each other. While the former relates to the "aesthetic furnishment of reality materialised by embellishment, animation and experience" (Welsch 1996: 2), the latter refers first to the technological and media production means of material and social reality, second to subjects' self-conduct in terms of "our practical attitudes in life and of moral orientation" (ibid: 17), and last to epistemological "categories of knowledge and reality, including the category of truth as ordained by the guiding authority of modernity, science" (Welsch 1996: 13), which "have assumed

increasingly aesthetic contours over the last 200 years" (ibid: 16). For Wolfgang Welsch, 'epistemological aestheticization' "is obviously the most fundamental of all the aestheticizations with which we're concerned today. It seems to me to form the actual substratum of current aestheticization and to explain its conspicuous acceptance. It operates as foil and engine, and also as counsel for these aestheticization processes. [...] [W]e enact this deep-seated aestheticization in a sweeping surface aestheticization" (ibid: 17).

Whilst Welsch claims the "old and elemental need for a more beautiful reality corresponding to our senses and feeling for form" (ibid: 2), that is "[t]he old dream, that of improving life and reality through the introduction of aesthetics, seems to being brought to bear" (ibid), as reason for aestheticisation, Honneth rather suggests that it is due to structural socio-economic transformations—i.e. the shift from a society formed through the organisation of penury to a society molded by the organisation of surplus—thus enabling people to have different choices and to decide according to personal preferences and taste.<sup>1</sup>

Aestheticisation is also an economic strategy to improve consumption outputs. Indeed, "[m]uch of this every day aestheticization serves economic purposes. The bond with aesthetics renders even the unsaleable saleable, and improves the already saleable two or three times over. And nowhere, as aesthetic fashions are particularly shortlived, does the need for replacement arise as quickly and assuredly as with aesthetically styled products: even before the already in-built obsolescence leaves article unserviceable they are aesthetically 'out'. Moreover, products which are becoming increasingly unsaleable on moral or health grounds, are being rendered presentable and saleable

<sup>1 &</sup>quot;Die ökonomische Entlastung von Überlebenszwängen, wie sie noch für die erste Hälfte unseres Jahrhunderts typisch waren, bedeutet für den einzelnen, nunmehr stets zwischen mehreren Handlungsalternativen wählen zu müssen, ohne dabei noch auf externe Kriterien der Zweckmäßigkeit oder der Opportunität zurückgreifen zu können; was ihm in solchen auf Dauer gestellten Entscheidungssituationen als Maßstab bleibt, sind schließlich nur noch die Neigungen oder Vorlieben, die er in Form von Geschmacksempfindungen in sich verspürt.Mit der Aufmerksamkeitsverlagerung auf das eigene Selbst wird das innere Erleben so sehr zum Bezugspunkt individuellen Handelns, dass sich aus dem Homo oeconomicus vergangener Zeiten das Erlebnissubjekt moderner Gesellschaften entwickelt: ihm ist nicht länger die Erreichung von äußeren Erfolgen, sondern die Steigerung innerer Erlebnisse der Zweck rationaler Planung seines Handelns, seine Lebensauffassung hat sich von der Orientierung an Überlebenszielen in eine Ästhetik der Existenz verwandelt, seine Selbstbeziehung schließlich hat den Charakter einer permanenten Beobachtung des eigenen Erlebens angenommen" (Honneth 1992: 523).

once again through aesthetic ennoblement. The aesthetic aura is then the consumer's primary acquisition, with the article coming merely alongside" (ibid: 3).

Yet, on his side, British-Pakistani economic geographer Ash Amin makes an important distinction where, in the process of aestheticisation, cultural elements enters the domain of consumption. "The 'aestheticization of commodities' and the 'commodification of aesthetics' are two aspects [...] which serve to blur the traditional distinction between economic and cultural activity. The first refers to the embellishment of products, artifacts, buildings, workplaces, infrastructure and so on, as a means of enlivening everyday life at the same time as legitimating consumerism and social acceptance of the imperatives of capitalism. The second refers to the increasing transformation of culture and cultural activity, especially leisure and recreation, into cultural industries, that is, commodities sold in the market to individual consumers who, in turn, increasingly identify cultural gratification with consumption" (1994: 31).

Since cultural practices are at the core of current aestheticisation processes, it is not a surprise if the driving actors belong to the arts —"[i]n today's aestheticization [...] daily life is being pumped full of artistic character" (ibid)—as well as to the entertainment, media, advertising and marketing industries. Interestingly, these are the same kind of business activity that have made BS emerged and worldwide acknowledged. They apply aestheticisation in the development of methods and technics of promotion to call for the attention of the consumer and potential purchaser, or the citizen and potential voter. The other way round is also valid since the growing investment of promotional practices in aesthetic concern is a result of widespread commodification and heightening competition where firms, brands, products but also political, social or cultural and artistic activities struggle for consumers' and citizens' attention. Economic and artistic strategies merge into each other to offer the more efficient visibility.

#### Eventalisation

Through aestheticization, the world is becoming a domain of experience. "Experience and entertainment have become the cultural lodestar over the last few years. A society of leisure and experience is served by an expanding culture of festivals and fun" (Welsch 1996: 3).

"Every boutique and every café is today designed to be an 'active experience'. German railway stations are no longer called stations, but rather, following their artistic garniture, call themselves 'a world of experience with rail connection'. Every day we go from the experienceoffice to experience-shopping, relax with experience-gastronomy and finally end up at home for some experience-living (ibid: 2). The aestheticisation of consumption and public life, altogether with its spatial/physical settings, takes the form of public, cultural and festive events whose aim is to improve growth in the consumption of commodities and services by promoting them with an enchanting experience, so American sociologist George Ritzer. 1 Call eventalisation this particular development of aestheticisation, meaning the bringing organising—into liveliness of aesthetic experience. Synonyms are animation, theatricalisation or festivalisation. However, the consumption industry is not the only client of eventalised enchanting aesthetic experiences. Indeed, this marketing technique addresses all forms of promotional activity aiming at attracting attention, whether commercial or political, or else.

"Events, whether organised (serial) or spontaneous (real), are always significative expressions" (Pløger 2010: 859). They produce an atmosphere, an ambiance, a flair, it is a total form of art capable of encompassing all human senses, thereby fully mobilising—and influencing—people's bodily feelings and emotions. "The social effect of an event is that it is experienced as a particular situation [...] that includes the intensification of people's sensed and lived experiences" (ibid). Therefore, the primary value of event lies in the putting in interaction of simultaneous corporeal presences. Presence is thus generated by eventalisation and can be experienced for the pleasure of the senses.

In principle, an event is something that solely occur occasionally. Yet, can an event evolve into something permanent? Can BSSs be qualified as permanent events? If an event becomes "formally regulated, repetitive, collective acts of behavior, standing apart from normal social life",<sup>2</sup> then it turns out to be a ritual. Ritual is also the anthropological

<sup>1</sup> See George Ritzer, Enchanting a Disenchanted World. Continuity and Change in the Cathedrals of Consumption (Sage Publications, 2010, 3rd ed.)

<sup>2</sup> Quoted from the entry "Ritual" in: Austin Harrington, Barbara Marschall, Hans-Peter Müller (eds.), Encyclopedia of Social Theory, London: Routledge, 2006.

meaning of festive events. Ritual happens to celebrate myth. One can evaluate the success or failure of a ritual as it respectively legitimises and solidifies or questions and alters the belief to its corresponding myth. Sociologically, myth is equivalent to imaginary and ideology. By symmetry, therefore, one can evaluate the success or failure of an event as it respectively legitimises and solidifies or questions and alters the belief to its corresponding imaginary or ideology. Therefore, one can evaluate the success or failure of a BSS as a ritualised event as it respectively legitimises and solidifies or questions and alters the belief the myth/imaginary/ideology of sustainability and mobility.

#### Aestheticisation of mobility and the environment

Due to their growing in volume, in importance, in relevance and in visibility, mobility and the human living environment (natural and built) are two important categories invested by aestheticisation processes. For Nathalie Blanc (2012) and Ossi Naukkarinen (2005), the intervention of 'aesthetic engagement' practices into these fields not only restructures the material conditions of city/nature and movement according to new aesthetic needs, but thereby also transforms through new experiences and perceptions the understanding of what movement and the nature/city are, therefore influence our capacity of action towards them. Out of that, new practices and new hierarchies emerge, re-organising these categories according to newly produced aesthetic values, thereby transforming the world. For instance, just think of the effects of the aestheticisation of vacation on tourism, or of digital wireless communication on presence.

#### 3.2.2. Aestheticised urban public sites

"But the territory that counts is more and more the territory of social interaction, not merely of physical proximity" Pierre Veltz, European cities in the world economy.\(^1\)

"Aestheticization is at its most obvious in urban areas" (Welsch 1996: 2). Indeed, "the planning of places, the design of spaces and the

In Patrick Le Galès, Arnaldo Bagnasco (eds.), Cities in contemporary Europe (Cambridge University Press, 2000), p.38.

relationship to objects can be indicative of the existence of a collective will to aesthetically organise space and time" (Jeudy 2003: 130; my own translation). But how has UPS become a site of aestheticised promotional activity?

#### From urban public space to urban public site

"The modalities of the social dimension of UPS have changed. If until a quite recent past public space had no other purpose than spatially enabling interactions between people by keeping in the built-up fabric some empty spaces as open as possible, henceforth UPS' mission is above all to control and constrain those interactions (Delbaere, 44; my own translation), making it a "frame of usages which are defined in advance" (ibid, 43; my own translation).

Accompanying the political-economic structural transformations leading to post-fordist regimes, the production and ameniting of public space has undergone during the last three decades major changes so that the term of UPS needed a redefinition. When Thierry Paquot (2009) talks about 'lieux publics', Anne Cronin (2010) means 'commercial spaces' and Sabine Knierbein (2010) proposes 'Zentral öffentliche Räume'. They all bear in common some characteristics. First, the qualifying adjective "public" in the phrase "UPS" does not refer anymore to the juridical status of property of that particular space but to the fact that it hosts public venue, thereby multiplying the typology of public spaces (e.g. streets, squares, but also shopping centres, transit terminals, etc.). Today, UPS welcomes audiences.

Second, driven by the growth in importance and in volume of advertising, the investment of commercial interests in the planning process has dramatically increased in the form of public-private partnerships, leading to a gradual change in the assignment of UPS becoming strategic sites of promotion. The street is often the nearest and shortest way for the act of purchase to happen. Such urban public promotional sites differ from the rest of public spaces since they are given a greater care regarding their usage and appearance through furnishing and advertising. Indeed, the ameniting of public space by the OoH industry occurs unevenly, as any economic actor "[d]riven by bottom-line concerns, [OoH] compan[ies] seeks out only those places where [their] products can generate revenue — hence the concentration of advertising is typically located in 'zones of exception' [...] where

economic development is the primary decision-making factor in planning" (Gaffney 2009: 153). In consequence, the hierarchy of publicly accessible places is reorganised.

# The design-related coalition of urban public promotional sites

The planning of such urban public promotional sites is driven by what Knierbein (2010) names 'design-related coalitions'. These coalitions of interests gather in public-private partnerships sometimes decades-long established relationships between outdoor advertising companies and municipalities. Together, they form a body having authority upon the production, design and physical equipment of public space. This occur following the rationale of the economic paradigm of 'attention', referring to the management of human attention in the context of information abundance. 'Design-related coalitions' design and amenity public sites whose function is to attract attention for the sake of promotion. The more authentic, spectacular, surprising, wins the attention.

Historically, "[a]lready in the 19th century outdoor urban advertising was a site for developing new promotional techniques for the industry as a whole, with London and Paris seen as the models for advertising innovation" (Cronin 2010: 3). Today, Anthonin Darbon, COO of Cyclocity France, explains in an interview that since his company signs contracts with municipalities that lasts for 10 to 20 years, JCDecaux "is not merely a street furniture provider, but first and foremost a guide to cities' urban development and imagination. [...] In some way, the job of JCDecaux is to amenity [i.e. to make a context/situation more convenient and pleasant] and animate public spaces, whether in a city's streets, a mall or an airport" [...] by targeting the socio-marketing category of the so-called 'hypermobiles'" (2013).

# Street furniture and the policing of public social behaviours

Although their presence in cities' streets and squares is hardly consciously noticed, because perceived and experienced as so ordinary, the sudden absence of benches, traffic barriers, bollards, post boxes, phone booths, streetlamps, traffic lights and signs, bus shelters, trees,

public lavatories, fountains, waste receptacles... and now BSSs would for sure be remarkable to us, though. According to Boyer & Rojat-Lefebvre, "street furniture are all objects or devices, public or private, installed in public space which offer a service" (1994: 13; my own translation) linked to functions of security, communication, information, orientation, play, rest, hygiene and transit. Their added-value is to make the stay in or the crossing of public space more convenient and pleasant. In addition, pieces of street furniture "contribute enormously to the feel and character of a place. They can even [...] become emblematic of the town or city they equip.' (Ayers 2004: 401). Thus, street furniture also ensures place identity and place image. Yet, their implementation is always spatially uneven. Already at the time of their modern emergence, "a distinction having been made during the Second Empire between the *beaux quartiers*, [...] and the poorer, peripheral *arrondissements*' (Ayers 2004, 402).

Historically, furnishing cities' streets and urban public spaces is a phenomenon that is without any doubt linked to the history of Paris' urban development—definitely marked by the activity of advertising especially since 19th century. "As well as serving to rationalize and sanitize certain activities that were carried out in the street, and on top of its capacity to jolly up otherwise dead spaces, Paris' street furniture was also used to structure, landscape and monumentalize the cityscape" (ibid). Furthermore, the development of street furniture always follows that of technology and aesthetics. Ayers precises that they often introduce new technologies to the mass public and their aesthetics match that of the dominant values. This could explain why BSSs have introduced to the mass public digital technologies and at the same time are the perfect materialisation into a piece of street furniture of the dominant aesthetic values of mobility and the environment. In social theory, objects not only carry signs in meaningful systems (Baudrillard 1968), but they also have an influence over our behaviours and ways of thinking (Winner 1986). Finally, for Hermant & Latour (1998) and Pégard (2007), street furniture not only enable but also sets, frames, directs, suggests, incites or constrains to adopt predefined practices and representations.

#### 3.2.3. Political-aesthetics of performance art

"it is certain that no circumstance creates livelier impressions and emotions in human beings than a public performance ... Nothing in the world is more infectious and effective than the emotions sensed in a crowd of people"

Johann Georg Sulzer, Allgemeine Theorie der schönen Kiinste, 1794.

"Performing arts are spatial arts', for they unfold and reveal their most essential qualities in real space"

Max Herrmann, Das theatralishe Raumerlebnis. 1931.1

#### What is a performance?

Performance is a practice whose aesthetic experience provokes important transformative effects, i.e. acts politically. The term "performance" most commonly refers to a tangible, bounded event that involves the presentation of rehearsed artistic actions [...], a performer (someone doing something) and a spectator (someone observing something)" (Bial 2007: 59), e.g. a play, a dance, a symphony, but also a religious service, a sport competition, a political speech, etc. "The recognition that our lives are structured according to repeated and socially sanctioned modes of behavior raises the possibility that all human activity could potentially be considered as "performance", or at least all activity carried out with a consciousness of itself" (Carlson 2007: 72).

Basically, "[t]he bodily co-presence of actors and spectators enables and constitutes performance. For a performance to occur, actors and spectators must assemble to interact in a specific place for a certain period of time. [...] The rules that govern the performance correspond to the rules of a game, negotiated by all participants — actors and spectators alike" (Fischer-Lichte 2008: 32). Performance is "[f]ocused not on art as 'object' [...] but on art as 'event' generating 'a situation in which we have an experience which causes us to gain a new, refreshed comprehension of our own situation of being in the world. The former

<sup>1</sup> In Erika Fischer-Lichte and Benjamin Wihstutz (eds.), Performance and the Politics of Space. Theatre and Topology (Routledge, 2013), p. 1; quoted from Jörg Dünne and Stephan Günzel (eds.), Raumtheorie. Grundlagentexte aus Philosophie und Kulturwissenschaften (Frankfurt am Main: Suhrkamp, 2006), 501-524, 502-503.

(i.e. 'object'), despite the potential operations of empathy, remains a rather abstract and intellectual process. The latter (i.e. 'event') engages the full activity of the human being as an embodied mind'" (ibid: 7). A performance only exists, only creates reality, as long as it is being performed; production and reception occurs simultaneously. It is nothing consisting of material objects, however it relies on material objects for its operation. The performance materialises a sensitive experience and links up body and mind where "corporeality dominates semioticity" (ibid: 19). "Fischer-Lichte speaks of performance as a process wherein 'the commonplace appears transfigured and becomes conspicuous'" (ibid.).

In terms of social theory, performance is related to ritual. "Rituals are performances that provide structure and continuity to our lives. They are a means of ordering the world to fit our perception. We perform rituals to mark the passage of time (harvest festivals, birthday parties), to transform our social status (wedding, graduations), or to ensure good fortune (blessings, certain prayers). In this way, rituals provide us with a sense of control over an uncertain existence. [...] Generally speaking, rituals exemplify and reinforce the values and beliefs of the group that performs them. Conversely, communities are defined by the rituals they share" (Bial 2007: 87).

#### Agents and mechanisms of performance

According to Fischer-Lichte, a performance needs different elements to function. Thus, it requires an 'autopoietic feedback loop' to survive, which is the circular self-generated mutual interaction between coparticipants of an event. "The feedback loop functions as a selforganizing system which must permanently integrate newly emerging, unplanned, and unpredictable elements" (2008: 165). A further mechanism is self-referentiality, i.e. meaning referring to itself, and which by making signifier and signified coincide, create its own index(es) of reality. Next comes corporeality, or the aesthetic body. In performance, generating corporeality depends on embodiment, and perceiving corporeality depends on presence. After, there is spatiality. "Spatiality is generated through the movements and perceptions of actors and spectators" (ibid: 114). It "is transitory and fleeting. It does not exist before, beyond, or after the performance but emerges in and through it [...] As such, spatiality needs to be distinguished from the space in which it occurs" (ibid: 107). There is also liminality which

"results form the ostensible contradiction between actively participating in a performance – from sensing the circulating energy physically to joining the action on stage – while experiencing the elusiveness of the entire event" (ibid: 67). "[T]he experience of liminality [...] generates transformation" (ibid.). Yet, "performance remains unpredictable and spontaneous to a certain degree" (ibid: 38). You cannot control a performance.

### Performance's political effects of transformations of reality

In Fischer-Lichte's understanding, performance constitutes reality by making it experienceable. "When creating specific spatial arrangements to stimulate new experiences, the use of space in performance can also deliberately favor certain possibilities and exclude others." (2008: 111). "Performance allows entirely ordinary bodies, actions, movements, things, sounds, or odors to be perceived and has them appear as extraordinary and transfigured. Performance makes the ordinary conspicuous. [...] When the ordinary becomes conspicuous, when dichotomies collapse and things turn into their opposites, the spectators perceive the world as "enchanted". Through this enchantment the spectators are transformed." (ibid: 179-80).

As political effects, a performance provokes: the blurring distinctions of positions, the reversal of roles and the collapsing of dichotomies (e.g. artist and audience; body and mind; art and life; aesthetic and ethic; distance and proximity; private and public; fiction/illusion and reality). It also creates communities by the co-production of performance event and generates meaning.

# EMPIRICAL COMPARISON OF THE CASE STUDIES

**4.1.** Aestheticised and eventalised promotion of mobility and the environment in Vienna's and Paris' urban public space.

The aestheticisation of mobility and the environment partakes to the production, the design and the ameniting of Paris' and Vienna's urban spaces and their transformation into promotional public sites. This section aims at identifying examples of such sites to illustrate the statements made in the previous chapter. It shows first cases with respect to the categories of the built and natural environment and second in regards to mobility.

### Environment: pedestrianised streets/squares and urban gardening

Pedestrianised streets and urban gardening are ideal-typical of the investment made by their producers to promote concerns about the built environment on the one hand and the natural environment on the other hand. In Vienna, the pedestrianisation of the Kärtner Strasse-Graben in 1974 and 2014 of the Mariahilfer Strasse are tow good examples occurring at different times but undergone by the same processes of transformation. Indeed, the pedestrianisation of these 'zentral öffentliche Räume' provoke widespread attention because of their high visibility within Vienna's public places hierarchy.



inefit:

Fig.15.: Graben 1970



Fig.16.: Graben 2014



Fig.17.: Mariahilfer Straße 2012

Fig.18.: Mariahilfer Straße 2014

In Paris, we can first single out the construction 1971-1977 on the empty Plateau Beaubourg of the world renown Centre Georges Pompidou including its pedestrianised surrounding, and on the other the partial pedestrianisation of the nationally famous Place de la République.



Fig.19.: Plateau Beaubourg 1971



Fig.20.: Centre Georges Pompidou with





Fig.21.: Place de la République 2011

Fig.22.: Place de la République 2014

More marginal—spatially and in the media—vet equally relevant, we can cite in Vienna the experiences led by "selbsternte.at" who provides land plots for rent and self-harvest in the periphery of the city, and "Guerilla Gardening" actions in more central places. In Paris, the growing trend of "jardins partagés" (shared gardens) just continue with a new name the well-known "jardins ouvriers" (workers' gardens) of the 20th century.

#### Mobility: the regulation of movement with street furniture

In Vienna as well as in Paris, the experience of movement is marked out with numerous types of advertising bearing street furniture, located not only at stops of the public transit network but also according to the attractively of places. In Vienna, this activity is conducted by the OoH media company Gewista, whereas in Paris this business is controlled by JCDecaux.

## **4.2.** The political-aesthetic experiences of Citybike and Vélib'

This last section evaluates the feasibility of an analytical analogy between performance art and BSSs. Because of the basic material structure of BSSs—i.e. fixed stations and moving bikes—performance art seems to be the more accurate artistic genre by which we can analyse the aesthetic experience provided by BS. Understanding the mechanisms of performance enable to better comprehend the aesthetic effects of BSSs. To that end, I have selected four elements of performance and attributed them with facts from Vélib' and Citybike.

#### Autopoietic feedback loop

The autopoietic feedback loop, vital mechanism of performance, can be identified on the side of Vélib' and Citybike in two manners. The first consists of the mutual interaction in public space of users, onlookers and maintenance workers in co-presence with each other. Together, they co-produce the event "Vélib" and "Citybike". On the other, the feedback loop also occurs on a mediatised level through the use of electronic means for the communication between service members and operators.

### Roles' reversal, the blurring of distinction and the collapsing of dichotomies

BS as (live) performance blurs the distinction between on the one hand the elusiveness of intellectualised, abstract and mediatised discourses of sustainability, innovation, access, quality of life, etc., and on the other hand the *realpolitik* of dwellers' everyday lived experience in/of city centres. Riding a Citybike or a Vélib' bike provoke a subtle transformation in the power relations of presence and movements in Vienna's and Paris' urban public spaces. Motorised traffic loses supports and cyclists become more active.





Fig.23.: A man in suit riding a Vélib' bike

Fig.24.: Three people riding a Citybike bike

#### Creation of community

From the inclusion perspective, the creation of community seems only valid in Paris. Vélib' stays in touch with its members through a blog, a facebook page and a committee of users co-managed with Cyclocity. On the opposite, some social profiles are excluded from the service: those who cannot get inscribed because they do not have a bank account, or those who intentionally vandalise bikes.



Fig.25.: Group riding Vélib' bikes

#### Spatiality

The spatiality of Vélib' and Citybike is different from the public space of Paris of Vienna, yet they are contained in it. In Paris, the coverage area of Vélib' extends the administrative boundaries of the city by 1.5km radius outward from the municipal border. In Vienna, Citybike operated a long time within the central districts, but has now largely now extended this symbolic limit.



Fig.26.: Vienna Citybike coverage area

Fig.27.: Paris Vélib' coverage area

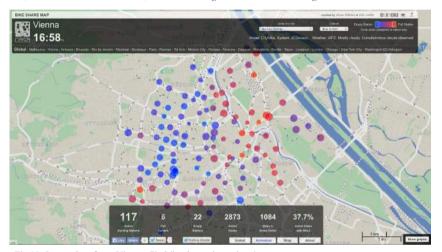


Fig.28. Screenshot from Vienna Citybike dynamic stations' occupancy map

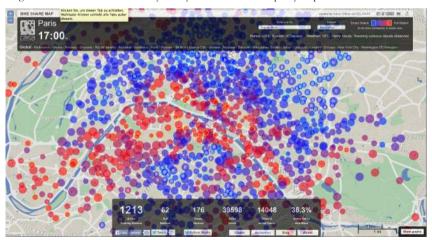


Fig.29. Screenshot of Paris Velib' dynamic stations' occupancy

# CONCLUSION

At the centre of this master thesis in urban studies lies the idea of perception of UPS as a field of human experience invested by top-down urbanistic interventions for the benefit of promotional activity, whatever the purpose (e.g. commercial, political, cultural, etc.). In this view, frames of perception of urban space and life are mediated via a particular mode of aesthetic experience provided by event-like urban projects taking place in purposely designed and equipped public sites. Thereto, BS consists of a dynamic 'architecture of usage' of public space reconfiguring the experience and perception of presence and movement in public space.

Such interventions are conducted by purpose-built urban 'design-related coalitions' who conceives and operates these promotional spaces according to specific social representations physically built in and discursively constructed around, so to say, these public places of promotion. We suggest that the power of the urbanistic-architectural artefacts BSSs lies in their corporeal performative character—i.e. when people make use of these perceptional installations and thereby

<sup>1</sup> The idea of architecture of usage as a process-oriented activity pertaining the social production of space comes here from Henri Lefebvre. In the preface of the French 3rd edition of La production de l'espace (1986), Henri Lefebvre "n'a pas assez marqué « le rôle de l'architecture comme usage de l'espace »" (Sangla 2010: 149).

embody the prescribed social representation of lifestyle and mode of behaviour, which eventually transform and constitute reality.

To conclude, the performance art analogy seems feasible to analyse social processes induced by the presence and movement of BSSs beyond the asserted transport effects of BS. We have also been able to link Vélib' and Citybike to processes of aestheticisation active in Paris' and Vienna's urban space, instead of to claims of sustainability. The promotion of urban sustainability with BSSs aims at changing the story and image of UPS for transforming the perception of it. Fiction and enchantment plays a crucial role in the bike-sharing urbanism.

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#### Illustrations

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# APPENDIX

#### 7.1. Interviews

#### 7.1.1. Interview with Rüdiger Maresch

#### Mr Rüdiger Maresch

English and History teacher, local politician and member of the Austrian Green Party, he is since 2001 elected member of the Vienna City Council and currently holds the function of Viennese Green Party spokesperson for environment and transport.

In the current (2010-2015) City of Vienna government, the Greens are in charge for environment, transport, urban development, energy, and citizen participation policies.

This interview was done at the Viennese Greens' premises in the City Hall on July 1st 2011. Discussion was held in German and transcript was translated by me.

**Matthieu Floret:** How are the City of Vienna and Citybike mutually? What kind of relations do both actors carry out?

**Rüdiger Maresch:** Well, good. There was already a first try that we set up but which failed. Citybike belongs to a private corporate called Gewista. 13% of Gewista belongs to the *Verband Wiener Arbeiterheime*.

It's good that there is a uniform system. Nonetheless, the situation of monopoly is according to me not really good. Although we fully support the current expansion of the BSS, we think that there should be several providers, and not this monopolistic position.

The thing today is that the BSS almost only function within the Wiener Gürtel [ring road around the inner districts of the city] which is a dense built-up zone and beyond it, in less dense areas, there's hardly any stations. The system is currently being extended outward the centre.

I want now to say that the cycling modal share in Vienna is so far about 5.5%, we want to double it during our term, i.e. by 2015, and obviously bike-sharing [BS] plays a role since it performs well and even though they have a monopolistic position.

Gewista was formerly a property of the City of Vienna and belongs now for 67% to JCDecaux. The position of JCDecaux as world leading outdoor advertising corporation is of concern when it comes to these BSS or urban medias because they can influence municipal public policies.

I would prefer to see some kind of umbrella organisation under whom authority you can find several private operators, some for instance providing e-bikes.

To sum up, in my opinion is Citybike a good experience, but there could be much more of them.

**MF:** What role do have Citybikes in transport and environment policies of the city of Vienna?

**RM:** I think that it is a good transport mode, highly visible in the city streets, to take people out of cars and put them on bikes. What I dislike however is that BS docking stations are located on sidewalks, where

people walk. They should be put on car parking space, just along sidewalks, but not on them. I think this is all due to the fact that for a long time in Vienna, although peoples where put at the centre of political discourses, in the reality this place was taken by cars. Nowadays, the modal share of private and single car-use is about 28% and cars occupy 80% of roadsides space. Of course, individually a car do need more space to park than a bicycle, but in overall, bikes have too less space on streets. This will change and Citybike stations should get more space, instead of cars. This is written in the Socialist-Greens City government coalition's agreement.

For those people who do neither have or nor want a bike, BSS is a wonderful idea. Take for instance someone who wants to go quickly somewhere in a short distance range when he/she can easily find a BS station nearby, it's good like that. But this functions only within the Gürtel. This is because Gewista was the opinion to install it in the city centre in a first phase, and then to expand it. If you want to go from Kagran to Floridsdorf [outer districts located on the left Danube bank], this is impossible because there's no stations over there.

In regards to bike policies in Vienna, there are discussions between City officials and Citybike/Gewista about the latter's participation in these policies. I remind you this is written in the Socialist-Greens City government coalition's agreement signed in November 2010. But you know, after the first try which failed within weeks, Gewista acts with caution, even though they're expanding right now. This is the result of economic interests and political will put together: the better are cycling conditions (e.g. appropriate bike lanes, etc.) in the city, the better will be the success of BSSs. However, this does not function in the winter for example, if snow is first evacuated from the road, then from sidewalks and finally on bike paths. Even more if snow is then dump on bike lanes! Priority must be set according to the more ecological transport modes: pedestrians, bicycles, tram, buses and metro. That was not the case before. Citybike can be practical when in the process of prioritizing the city traffic to more ecological transport modes, people will would like to test the new possibilities and for instance will try them with a Citybike before maybe buying for themselves a bike. After 6 months of "biking propaganda", we can see now that there are double as much people biking now that before: it pays off!

The interests of the City government and Gewista are to have the highest possible biking modal share. If the share of cyclists grows, it

means the share of car drivers declines which means less pollution, more space, less parking tickets. If the modal share of cyclists increases, the demand for Citybikes will also augment, and therefore they will earn more money. It's a win-win situation. But for that they need to anticipate and risk to go with the demand. According to me, if Citybike wants to success, they will have to open much more stations, even in Kagran for instance.

I do not know exactly what is in the contract, but there's one since Citybike is a monopoly. Well, again basically, I think that Citybike is definitely part of the mobility concept for Vienna. It's the same for carsharing. They are plenty of examples worldwide, whether with fixed stations or free floating fleets.

Besides that, what is very interesting are these kinds of mobility pass or cards which give access to an integrated public transport [PT] networks, including alternative transport modes and new mobility services like bike- and car-sharing. In Austria it takes always a bit more time than in other countries.

Mobility aspects in Vienna

**MF:** Intermodality<sup>1</sup> in Vienna?

**RM:** Look, for instance, it is still generally not allowed to take your bike in the metro and we want to change that. The same for tramways. There is still some to be negotiated.

Bike intermodality will only function if there's a high density of Citybike stations available along your journey, which is not the case today, except in the city centre. Today you would need to carry your bike with you in the metro.

It's all a question of costs. The future lies in too high ownership and maintenance costs for cars especially. You wouldn't even need to own a bike if you can easily and conveniently find Citybikes at low costs wherever and whenever you need. Indeed, a solution represents the access to a system of shared transportation instead of ownership of

<sup>1</sup> Intermodality is a trip made from A to B using different transport modes. It is different from multimodality which is an offer of several different transport modes between A and B, but does not mean using different modes.

your own transport mode. Access given via a mobility card or pass which include all transport modes in an integrated scheme. This is something we are actively discussing with SPÖ and they seem to be interested. Then what counts is not the ownership but the access to [mobility].

A huge problem in Vienna is that of stationary traffic. On the opposite, when you look at Barcelona, there are many streets where you don't see any parked cars. If you want to give every car a parking place, it would cost € 25 millions, just forget it! And that's why I think we need a system away from ownership. A car actually stands still about 95% of its lifetime. It's more an immobile object than one in motion.

Therefore we need a lot of ecological education and learning, in order to change mentalities and transform our acceptance of property and ownerships. It's not like the automotive industry saying everyone needs a car; one car for 10 people is enough. Our aim is: Stehzeug away!

[can't exactly translate "Stehzeug" but means the standing or stagnating thing or stuff, i.e. the parked cars]

**MF:** Mixed land-use and mobility?

**RM:** Well, if you take Aspern Seestadt [one of the biggest European urban development project, located at the eastern fringe of Vienna on a former airfield, www.aspern-seestadt.at], for the moment it's not so successful. Universities for example do not want to put campuses over there. In outer districts of Vienna, which are mostly residential, there's no life on the streets. People just leave in the morning to work and come back in the evening, park their car and go up to their apartment with the elevator. In the inner districts, it's a bit different.

A very important point in regards to this is that the nature of labour is gradually changing. Until recently you had big factories at the periphery of the city to which workers drove by car or used PT. An own apartment and an own car with which you drove to your working place, that was socialism in Austria. Actually, first by tram and then by car. That was progress. But today if we look at the evolution in labour conditions, and ask the questions what is working today, where do people work, and how? Look, there about 240,000 commuters from Lower Austria and Burgenland coming to Vienna for working. It's colossal. Back then, people worked at home, then, with industrialisation

they had to move from home to factories. This logic still remains to some extent today. However, with Internet today, it's possible to telework. I think mixed land-use is something to be pushed forward in order for the city to become one of short journeys and proximity, and not anymore of isolation, marginalisation and exclusion.

In fact in Vienna, pedestrians are in the centre of transportation policies, although in the reality, in the phase of decision and implementation the pedestrian is substituted by the car. Every day you have 150,000 people crossing the Danube from Donaustadt and Floridsdorf driving into the city. It's a huge amount of traffic and we have to change that. People always have to be on the move. This is actually something due to the old socialist politics in Vienna which used to say "Commuting time is working time". People drive 1 hour back and forth, then park their car, hop in the elevator and then seat in front of the TV. There's no interaction in the streets, public space is empty. It's somehow anti-democratic. A good illustration is Tokiostraße, in Donaustadt. This street is similar to many suburbs in Paris. This kind of planning generates a lot of traffic. I don't think by adding some offices you would be able to really change something. I think it's a matter of urban development policy. This is not something easy and simple, for sure. We need to rethink labour and dwelling together. The agglomeration of working places in clusters generates too much traffic. Look at the General Motors' manufacturing plant. To soften the impacts of such things, we develop mobility plans for companies and their employees. It's important, especially when you think that 60% of commuters from Lower Austria and Burgenland just drive in and park their car where they work.

MF: Can you give me a mobility concept for the city of Vienna?

**RM:** We had already in the past some experiences to set up offers of carpooling and similar things, but they failed. Today, on average, there are 1.2 persons per car. If we reach the amount of at least 1.5 persons per car, i.e. a reduction of 20%, we would already solve a lot of traffic problems. But that does not function because there is this ideology of "I want to own a car". This means that the principle of sharing the transport modes, such as car and bike-sharing, is an important issue to help us tackle problems. Reducing space for cars, people spending more time outside and you get more social interactions. That's what we need.

#### 7.1.2. Interview with Hans-Erich Dechant

Mr DI Dr. Hans-Erich Dechant

Engineer, Chief Operating Officer of Citybike Wien.

Before managing Citybike, Hans-Erich Dechant also played a determining role in the previous and first Viennese bike-sharing [BS] project, called Viennabike. He comes from the Viennese bicycle messenger scene and used to work for the Austrian cycling lobby ARGUS. Besides, he spends some time in the bike kitchen of the WUK, a very famous inter-cultural centre and multi-purpose workshop in Vienna, which premises were a locomotive factory transformed into an alternative cultural place in 1979, thanks to the squatter movement from that decade.

This interview was done at the Citybike Wien office, located on the ground of the Gewista headquarter on July 4th 2011. Discussion was held in German and transcript was translated by me.

Citybike/Gewista: company and service

Matthieu Floret: For what reason was Citybike created?

Hans-Erich Dechant: Gewista is an advertising company which exist for decades and Citybike is a project of Gewista, a branch of this company placed under its authority. In 2002, there were already a BS project launched, called Viennabike, which eventually failed. The latter was a copy of the Copenhagen BS program, with coins insertion to unlock the bikes. What came out of that first experience was that there was a high demand for this kind of service, but there was a better controlled or regulated usage of the bikes needed. Exactly at that time (2002) Gewista and JCDecaux had tight relations. Besides, the latter was testing a bike-sharing system [BSS] prototype and finally Vienna seemed to be a good spot to give the product Cyclocity a first try. I would say, we made it here in Vienna ready for mass production.

Vienna city government was looking at that time for a new partner and seeing the high media coverage of the Viennabike experience, they

logically thought there was here a good potential and finally we came together.

Actually, the idea of mixing outdoor advertising and street furniture already came up in France in the 1960s when Jean-Claude Decaux reinvented the bus shelter. So far, municipalities were in charge of their construction and maintenance which were quite costly. Jean-Claude Decaux and his small company called JCDecaux proposed 1964 municipalities to take these costs in charge in exchange of putting advertising on the bus shelter he made freely available to local authorities. That was the start of an immediate success, and meanwhile his company offers many other urban public space services according to the local needs like benches, public toilets, and so on until now bikesharing systems.

**MF:** For what audience is the service thought?

**HED**: For humans! Of course, because of the dimensions and its type, children and disabled people can't ride those bikes. The service is thought to serve the largest possible population, therefore we cannot offer special bikes. Besides, the share of Citybike users who are tourists is about 15%.

MF: What is the aim of Citybike?

**HED:** As said, Citybike is a branch of Gewista and it is partly under my responsibility. My assignments from Gewista are to sustain the Citybike service, make it attractive and keep good relations with the city of

On Gewista's side, their aim is through this service to maintain good relations with the city of Vienna, that the city of Vienna enjoys Citybike's offer which is in a general manner of high importance for an outdoor advertising company.

MF: What interests does Gewista follow with Citybike?

**HED:** Well, Gewista as outdoor advertiser sells advertising products. For that purpose they have several advertising mediums available. However, Citybike is not directly in the development strategy on the company included. It's an extra offered by Gewista. Of course, on the

Citybikes you can see a bit advertising, but this is only to partially cover running costs of the system, not to make money. The essential here is that we propose something to Vienna and the benefits are first for the city than for us.

**MF:** Tell me about the evolution of the Citybike service. How does it look like now and what plans are drawn for the future?

**HED:** Gewista got the contract to implement a BSS in February 2003. I was then hired in March, in charge for the technical domain, and the BS service was due to be open in May. Big stress! First built stations were not already matured and we started with a limited operating system for what we call "Alpha-users" and after the first four weeks-test we opened three stations to the public. To tell you about the system, right at the beginning problems which needed on site manual intervention occurred with 20% of the bike hiring volume. If nowadays this would still be the case we would perhaps need 100 full-time technicians!

At the start, we understood Citybike as a prototype. For that purpose, one of our first docking station was built right next to a famous club [Flex, famous for its alternative scene] in order to see how it goes with vandalism. We learned a lot from this, but not only us, also the people there since they were aware for being used as guinea pigs. From that we saw we needed to change the system functioning with keys, and we continued building new docking stations. Eventually, we introduced the bike hiring system with bank card. In 2004 we introduced a customer card, a tourist card, and since 2005 with credit card.

Currently, we dispose of 79 docking stations, a contract to expand the system towards 120 stations until 2015. But I think this will go faster as planned. Further perspectives depend on Viennese politics. Since we launched the system, many technological improvements occurred, mainly at the docking stations and some on the bikes. I see the Citybike as a simple, easy-to-use bicycle which should be available anywhere at any time. When we started 2003, we were two people working on the project, and now thirteen. However, our hotline as well as IT is outsourced to subcontractors.

**MF:** Is it a financially sustainable business?

**HED:** Citybike itself is not financially sustainable since the contract stipulates that we are assigned to offer a free BS service, and we try our best to achieve this mission. The only financial income we get from the users is this one-time-ever 1€ fee when you register to the service, but the aim of this is only to control the banking coordinates veracity in order to identify the customer. Of course, Gewista can afford the Citybike Wien service.

However, the current expansion of the network is fund by the City of Vienna. We collaborate together for instance on the choice of the new docking stations locations, and the construction works are paid by the City of Vienna, about 70,000€ per docking stations.

**MF:** What does Citybike think of its monopoly on BSS market in Vienna?

**HED:** We do not possess a monopolistic position on the market, only very strong, since there is another operator in Lower Austria [Nextbike] with some stations located at the fringe of Vienna. Regarding this situation, there is unease expressed by the transport authority [Verkehrsverbund Ost Region, VOR] because both systems are not compatible. It would make more sense to have a uniform, integrated system accessible to all, and centrally managed, not like for rail privatisation in the UK. Actually, it should even become an official public transport since it is a collective transport mode, and not privately owned. Even though Citybike Wien is a private company, we fully collaborate with VOR. For instance, our system is included in their online journey planner [www.anachb.at].

**MF:** Since provider and product-service are the same (i.e. JCDecaux and Cyclocity), can you give me similarities and differences between the Viennese and Parisian systems?

**HED:** About similarities. Technically, we have same bike racks at the stations, and the bikes are the same too. On the point of view of the operational processing, the use of bank and credit cards are similar. This is a very important point for the success of the system.

About differences, however, in Vienna when you register to the service you have to fulfil with name and address whereas in Paris not. In Vienna there's no deposit to pay, in Paris you need to pay a deposit of 150€. Furthermore, when we compare both networks, Vélib' has a tight network mesh; you can find a docking station every 2 to 300 meters. JCDecaux was able to accumulate the knowledge they gain in Vienna and in Lyon before implementing an efficient and dense BSS in Paris. In Vienna, the meshing is currently about 800m and this is definitely too high.

**MF:** How do you expect the impact and development of collaborative consumption as economic model to deliver urban services (e.g. BSS)?

**HED:** I have to disappoint you but I do not think that Citybike Wien can be labelled as such. For the simple reason that you do not pay for the service, which is funded by advertising. Citybike is a free BSS. It's like a gift. The production scheme is actually a public-private-partnership. Nevertheless, it is true that on the point of view of consumption, when it comes to share resources, it can maybe be understood as collaborative consumption. I think it is something very good. However, this is only a new trendy marketing concept, a new name put on an already existing way of doing.

**MF:** Is there something like a Citybike Users' association?

**HED:** I do not know about anything. There was once an online forum, but it has not been active for a long time. I would appreciate any new initiative. This would be something constructive. However, we nevertheless get feedbacks from users since we conduct surveys and polls.

Citybike/Gewista: the operational system

**MF:** How do you decide about the localisation of Citybikes docking stations? What is the spatial strategy of Citybike/Gewista? Do Gewista's outdoor advertising and Citybike stations have the same localisation rationale?

**HED:** Currently we focus on the improvement of the system. On the one hand by densifying the network, which is our priority, in the inner districts where you get a mesh a bit below 800m, we fill interstices but without concrete goal, and on the other hand we connect the outer districts with the network, what was not the case before. There is a strong gap between inner and outer districts. The frontier is the Gürtel [ring road around the inner districts of the city].

For the moment we know that each bike in average is ridden between 3 to 3.5 km [a day?]. The crucial here is to make as much goals available possible, i.e. stations. The denser the meshing, the more potential goals you can reach within 3 to 3.5km but at one moment there's a risk of saturation of the system. By experience in other cities, we know that with a mesh of 200m you still have not reached this saturation point. We also seek to establish bike stations at interconnections with metro stations and tramway crossroads, public buildings and places with high amount of flows. Of course we take touristy spots into account like Schönbrunn, but the share of tourists using Citybike is only about 15%, so no big deal.

About the installation of new docking stations, since this happen on the public domain, we need an administrative authorisation which includes many aspects depending on the place where the installation is conducted.

**MF:** What role do ICTs and mobile communication have in the service?

**HED:** Information and communication technologies (ICTs) as well as mobile communication devices play a crucial role in the provision of the service. Merely for users to know where there are available bikes and where there are empty racks to leave the bike, ICTs and especially the Internet are of great help to plan journeys. Citybike Wien, under general terms and conditions, freely opens its data to private IT developers so that they can develop mobile phones applications for the public. We do not develop ourselves any of these applications for different reasons: costs, constant changes in technologies and so on. It's not our job. The Citybike system is available on different web maps, from Google Maps to AnachB.at and others. All this enhance the quality of our service and we're continuously working on it. It's definitely a crucial topic.

**MF:** What are the reasons for your tariffs and lock on/lock off systems?

**HED:** The easiest and most used way of getting to a Citybike is by hiring a bike with a conventional bank card, featured. The reason for this is that in Austria there are about 8 million holders of that type of bank card [In Austria you have approx. 8 million inhabitants]. For us it was a major step forward to enforce this system. We simply thought why not use what everybody always has by him/her. Indeed, everyone has a bank card in his wallet or her handbag and thus you can have direct and immediate access to the service. Another possibility is to fill in a form, if you desire a customer card, but this takes about 2 weeks until you get your Citybike Card and that you can hire a bike.

We have a progressive price setting. In the background of this price setting there is our failed experience with the previous BSS Viennabike. At that time the media reported that the bikes were stolen, but actually this is not true. In fact, people hired bikes but not according to the general terms and conditions we set. These rules said that one can hire a bike to go from A to B, within a delimited area, not allowed either to remove it from public space or to lock it on with its personal lock. May people took the bikes for one day, one week or 3 weeks and this of course was not the idea of bike-sharing. And of course we were not able to know who did not observe the rules since we could not track the bikes. Finally, when we introduced Citybike we shifted the hiring paradigm from distance to time on a one hour base, which is the maximum time you would need to go to the next station. If you abuse the system, i.e. you ride your bike longer than one hour, then you have to pay. Beyond one hour, the longer you keep the bike, the more you pay. If we would restart the system today from scratch, we would set a half-hour base, like almost in all BSS around the world, and not one hour, since our median hiring time is about 10 min.

Citybike/Gewista: mobility in Vienna

**MF:** Would you describe Citybike as an individual public transport system? If yes, what role does Citybike play in the mobility in the city of Vienna? Is there the intention of integrating use and accessibility of

Citybikes with other transport operators in Vienna (Wiener Linien, ÖBB, and car-sharing providers)? Can we talk of it as intermodality?

**HED:** Definitely yes! Well, we are part of the Viennese ecomobility [in German: Umweltverbund. Notion describing since the 1980s the planning and promotion of environment-friendly and integrated transport modes]. In Vienna, it is easy to reach your destination by bike and we play there a big role.

In one of our surveys, we found out that 85% of Citybike users used the BSS in addition to public transport. Intermodality is an important use pattern of Citybike.

A current project with intense discussions and which is thought to strengthen intermodality is the one to have a unique mobility card including access to public transport as well as to bike- and maybe carsharing. But compared to the main transport operators in Vienna, which means Wiener Linien and ÖBB, Citybike is with Denzel Drive [car-sharing] a marginal stakeholder.

**MF:** What is the share of Citybike users in the cyclists' modal share?

**HED:** Well, we had some figures, but they are old now. So I do not think these would be relevant for today. However that may be, I can only tell you that we have about 500,000 journeys per year and with each bike being ridden in average at about 3km per journey. Moreover, due to the spatial distribution and the meshing of our system, the share of Citybikes in the cycling traffic is of course much higher in the inner districts of the city than in the outer districts.

**MF:** Does Citybike offer other services articulated around cycling, ecology and sustainable lifestyles in the city, e.g. awareness raising, events, online/offline community-building, etc.?

**HED:** Not directly. Citybike takes part to some events with its partners, but we do not organise anything ourselves.

#### Citybike/Gewista and Vienna City government

**MF:** Citybike is a 100% private corporate. How are Citybike/Gewista and the City of Vienna officials mutually? What kind of relationship do both actors have together? Especially, about the 2015 expansion plan of the Citybike system. Is there any contract?

**HED:** Well, it was 100% private. Now there are subsidies from the City of Vienna, since February 2010, for the planned and undergoing expansion of the system. Between us and the City of Vienna, yes, there is a contract.

**MF:** Is there, in your opinion, a correlation between political orientation of a City government and the implementation of a BSS?

HED: Well, I think that if you look at the sharing principle, in regards to collaborative consumption, and ecomobility, in regards to environment-friendly lifestyles, these are respectively supported by social-democrat and green political parties [the City of Vienna is ruled by the social-democrats since 1919, except for the period 1934-1945. Since October 2010 elections, it is a Socialist-Green coalition who is in charge of the City government]. But beyond this, Gewista and JCDecaux, as outdoor advertisers seeking profits, solely propose BSS as a new product in their street furniture catalogue. Let say that these private companies were the best able to launch bike-sharing services. Meanwhile, you have new kind of actors who entered the segment. Honestly, I don't think that there is any political reason explaining why outdoor advertisers launched such systems.

# 7.1.3. Interview with Lea Marzloff

#### Mrs Lea Marzloff

Geographer, expert on mobility and innovation. She works for Groupe Chronos Consulting & Think tank (http://www.groupechronos.org), led by Mr Bruno Marzloff. The interview was held at the office of Chronos on July 8th 2011 and conducted in French, transcript translated by me.

Matthieu Floret: How has Vélib been accepted and appropriated by the Parisians?

Lea Marzloff: In my opinion, a crucial issue for Vélib' is its appropriation by the users. Secondly, here at Chronos, we think that despite Vélib' stays a marginal transport mode it is an additional offer to public transport and really need to be fully articulated with the existing mass transit network in order to gain efficiency. Moreover, Vélib' is what we call a proactive way of moving [un mode actif] through the city and not only just a recreational service for sunny Sundays. Then, a further issue is the relational configuration of the involved actors. Should the implementation and running of a BSS be the job of outdoor advertisers is for instance an interesting question. Finally, we can raise the issue about how and to what extent is Vélib' part of a more general cycling policy in Paris.

When the City of Paris launched its BSS, I was working for JCDecaux and I spent two months on site. Already, I noticed the diversity of people hiring bikes. During summer 2007, you could see youngsters, elderly, businessmen, fashionistas, tourists and so on riding their Vélib'. Right at the start, the BSS has also been an important means for sociability in public space. The first users of the scheme, proud (because of the symbolic power of being part of the once worldwide biggest BSS) and holding a relative knowledge, easily helped the newbie. Moreover, we can say that there was a kind of re-discovery of the meaning of place and neighbourhood via the docking stations. For instance, it was reported that people wanting to try out for the first time a Vélib' entered the local bakery to which in front the docking station is placed in order to get advices. On the web, online communities, fora

and facebook groups were immediately created. Mobile applications with maps were launched. There was a real craze around the start of the BSS which eventually slowly faded away after a couple of months. However, this activity produced by the users themselves did not disappear since later on the City of Paris and JCDecaux created a website, blogs and a users' committee in order to channel, institutionalise and better organise the Vélib' customer service.

As I mentioned right at the beginning of the interview, the appropriation of the Vélib' by the Parisians reveals in my opinion something truly meaningful. When kids use Vélibs as carousel or youngsters only sit on it instead of on a bench, this shows the various way people appropriate this object. I think that Vélib' is a special urban artefact, generating more interests and even passions than public phone booths for example.

I would like now to speak about the usages of Vélib'. In 2009, TNS-Sofres [a market-research and opinion poll company] published a survey for the second birthday of Vélib'. Some figures: in 2009, after 2 years of service there were 50 million journeys recorded, today, after 4 years we passed 100 million. In 2009 again, we counted 170,000 yearlong subscribers. An interesting fact is that 36% of the users live in the near suburbs of Paris! And then, what is the usage of the yearly subscribers? According to 2009 figures, we can notice that 27% of them use Vélib' to commute, 13% for leisure, 13% for professional meetings, 10% go shopping, 9% to go to restaurant and finally 7% to do some sport. Furthermore, 28% of the bikes' hiring is happening after 22h30 and before first metros in the morning. These figures reveal the variety of usages regarding different needs. Vélib' is a polyvalent and multipurpose mobility service. It shows that as well as the diversity in the users' socio-cultural composition, there is diversity in the practices of the service. It is in my opinion part of the rapid appropriation of the system by the Parisians, reflecting their diversity. It is not possible to say that Vélib' is only a mobility service for bourgeois-bohemians [or creative class].

In regards to intermodality, 40% of yearly subscribers use Vélib' to finish their journey started by PT, and 42% of them start their journey with Vélib' before going on by PT.

**MF:** Is Vélib a local service or a mobility service?

LM: It depends on how you define proximity. It is something near to your home, or near your workplace, or in between? If one considers the city as an archipelago of places, then Vélib' fills in the interstices between places, despite the already good multimodal offer. It can be used for longer journeys which are planned, or even just spontaneously to do 200 meters and to gain 5 minutes. Well, it's easy to be opportunistic since the territorial meshing of Vélib' is about 2 to 300 meters. Proximity too because once you start to use the system you get use to it and you've got your habits about where are your reference stations.

On the other hand, looking at Vélib' as mobility service, you have to know that the average trip last about 20 minutes. It's very long within Paris! Regarding the modal share of cyclists in Paris, Vélib' counts for 35% of it.

Despite its marginal weight in the overall mobility in Paris, Vélib' does have a very high visibility, acceptance and appropriation in public space. This is not the case of the RER for instance, even though the latter system transports incomparably much more people throughout the city. A further point to mention is that the BSS has got stations located in the first ring of suburbs 1.5km around the City limits and therefore integrates this area within the city. I would even say this participate in the building of a common urban/metropolitan identity.

However, it is important to situate the Vélib' experience in the context of proactive cycling policies. Indeed, the study "Le vélo en mode actif" [PREDIT 2008] demonstrates the cycling paradigm shift from recreational to everyday activity and transport mode.

**MF:** What is the future of Vélib'?

**LM:** I remember when  $V\acute{e}h\acute{v}$  was launched in Lyon, it triggered a dramatic increased in cycling. Some figures state that for one Vélo'v, there was 3 to 4 bikes newly used on the streets. For Paris however I do not know. I think that Vélib' will perdure beyond 2017 [end of the current contract]. It is a very important economic issue, at least for JCDecaux.

On the other hand, in the context of sustainable mobility planning, BSSs are in my opinion just one among many others solutions, more or less financially interesting, depending on specific local conditions. Whatsoever, the direct costs for users make them a highly attractive transport mode. Actually it is so attractive in the cases where Outdoor Advertisers run such systems, since the BSS is then almost funded by publicity. In cases where BSS are for example run by either transport operators or by the municipality itself, it becomes an economic burden.

Another issue is the inclusion of BSSs in the overall mobility strategy of cities. Integrating BSSs access and use in the existing tariffs and network systems is a good factor for success, such as in Lille or Bordeaux.

## 7.1.4. Interview with Anthonin Darbon

#### Mr Anthonin Darbon

Chief Operating Officer of Cyclocity France, 100% subsidiary of JCDecaux SA. The interview was conducted May 14th 2013 in the main premise of Cyclocity France in Cachan, Paris' outskirt.

## Cyclocity

Matthieu Floret: Why is JCDecaux in the bike-sharing business?

Anthonin Darbon: In the early 2000s, Jean-Claude Decaux got the intuition that bicycles in cities could be used as vehicles for advertising. His idea took then shape when he created Cyclocity to offer a bikesharing service. According to him, bike-sharing systems meet the growing need of mobility in cities. Besides, as Paris' councillors desired to promote bike riding as form of commuting but without having to deal with the wild and chaotic parking of bicycles, which, according to them, might have degraded the image of their city, JCDecaux's bikesharing scheme appeared as an ideal solution ensuring a regulated bicycles' parking and traffic flow as well as an aesthetic integration into Paris' architectural and urbanistic landscape. Thus, it is when JCDecaux's offer met Paris' demand that the idea of a large-scale scheme organised with fixed docking stations became reality. Of course, the idea of bike-sharing was not new. Yet, JCDecaux's offer fits best today's needs, demands and constraints.

**MF:** What exactly is Cyclocity?

**AD:** On the one hand, Cyclocity is the generic name of the bikesharing product-service of JCDecaux. On the other, Cyclocity is the eponym company, 100% subsidiary of JCDecaux SA, created 2005 to win Paris' bike-sharing market. With 500+ employees, the company's field staff (mechanics, service technicians and managers, relation with service users etc.) operates and maintains in France and only for the French market the Cyclocity systems.

The first set up of a Cyclocity system was carried out in 2003 in Vienna by Gewista, the Austrian subsidiary of JCDecaux. With few docking stations and a very wide meshing, the scheme Citybike Wien was then thought as an original way for tourists – and not for the Viennese – to discover the city. For JCDecaux, this real-life test served as support-concept for other cities, yet the system was still a prototype needing improvement. The real start, so to say, of bike-sharing as we conceive it today, i.e. as an individual-collective commuting mode, was the implementation of Vélo'v in Lyon in 2005. It is only from that moment onwards that the Cyclocity bike-sharing system became a product in its own right listed in JCDecaux's commercial catalogue.

For its operation on the French market, JCDecaux separated its bike-sharing activity from that of street furniture for organisational and economic reasons – just think of the scale and scope of Vélib!! This separation follows the corporate group's organisational rationale, structured around four business segment categories: billboards, street furniture, airports and public transports, plus bike-sharing service now. In all the other countries where JCDecaux is running its Cyclocity system, the number of employees is not sufficient to make this separation, and thus they are operated and maintained directly by the staff of JCDecaux's or its local subsidiary. The conception and development of the Cyclocity system is the responsibility of the inhouse engineering and technical staff. Jean-Claude Decaux himself played until recently a leading creative role in this respect. He set the technical specifications of which the two main measures: users' accessibility and bank account-based service registration.

While JCDecaux's bike-sharing system is called Cyclocity, every bike-sharing scheme where they are implemented are named differently. Thus, Vélib', Vélo'v and even Citybike are municipal brands, that can be kept independently from the service provider and service contract. JCDecaux's product-service Cyclocity includes:

- provision and maintenance of fixed stations;
- provision and maintenance of bikes;
- the management of traffic flow;
- smartphone apps;
- advertising the service;
- a telephone and electronic customer-relationship-management;
- the production and the provision for statistical purposes of digital data generated by bikes' and users' traffic;

- editing and printing of maps;
- the co-management of a service members' committee.

JCDecaux or its local subsidiary is the owner and operator of these divers elements which are vertically integrated into the corporate's structure. The company manufactures the docking stations in its own engineering factory located in [the French department of] Yvelines. The production of bikes are outsourced, in particular to Accell Group whose factories are located in Saint-Etienne and in Hungary.

**MF:** What is JCDecaux's business model with Cyclocity?

**AD:** For JCDecaux, Cyclocity is above all a service, not only a product, which can only successfully run if the schemes' maintenance and the service interaction with contractors, i.e. on the one hand municipalities and on the other hand customers-users, are of high quality. In addition to the commercialisation of outdoor advertising space, these three elements form the business core of JCDecaux since 1964. Cyclocity systems clearly follow on from the Abribus [JCDecaux's first commercial product listed since 1964 in its street furniture catalogue] and the overall street furniture activity of the company. Our commercial activity follows a very simple but strict pattern: supply of street-furniture product-services to municipalities and supply of outdoor space to advertisers. Tu sum up, like with a system of communicating vessels, revenues from advertisers and major brands sponsor or fund the street furniture provided and maintained free-of-charge by JCDecaux for local authorities and for people's usage.

**MF:** For who is Cyclocity intended? Who is the audience?

**AD:** In 2007 and 2008, based on marketing and sociologic studies made in collaboration with experts and researchers, the marketing and communication office of the group published a couple of foresight analyses envisaging a certain category of the population which is our commercial target. Characterised by their way of life, what we call the "hypermobiles" are urbanites, tourists, senior executives, students, etc, who mainly use bike-sharing to commute. These people are our audience.

**MF:** What about the competition? Clear Channel for instance?

**AD:** On the worldwide outdoor advertising market, Clear Channel is indeed one of our competitor, perhaps the biggest, but in a much lesser extent regarding bike-sharing. Their system is too old and less developed than ours. Our other competitors on the bike-sharing market are in France the transport providers Keolis, Effia and Transdev, whereas in North America you find the vendor PBSC and operator Alta. No need to mention China and its huge potential market.

MF: What will happen next with Cyclocity?

**AD:** There are numerous possible developments. First in terms of business volume. We count today 400 schemes worldwide, and figures continually grow. But contrary to some sociologists who used to claim that this was just a trend which perhaps would be able to bring back bike riding into fashion but won't last 10 years before disappearing, I am convinced that bike-sharing will continue to develop towards fixed stations. Of course, it fosters private bike riding while completing interand multimodality. If you take Paris, for example, in terms of ridership, Vélib and private riding have grown in parallel. I can easily imagine that in near future every 100,000+ cities will be equipped with a bikesharing system. It is already the case in France, Spain and Italy. North America and Asia follow. Second, evolution will happen in technical terms, perhaps with the implementation of electric bicycles. However, it is especially the service itself which will develop, in particular with smartphone apps. Like any other product or service, it must adapt to the market.

#### JCDECAUX AND THE CITY OF PARIS

MF: What relation do JCDecaux and the City of Paris have?

**AD:** For JCDecaux, Paris is historically very important. The largest Parisian street furniture market is hold by the company SOMUPI (Société des Mobiliers Urbains pour la Publicité et l'Information), an ad sales agency founded 1979 and active only in Paris, owned in 2013 with 66% by JCDecaux SA and 34% by Publicis Group SA. The joint-venture is in charge of the operation of the street furniture bearing the 2sqm and 8sqm billboards, as well as of Vélib. Within the municipal

administration, this market is managed by Laurent Ménard and Thierry Lange for the Street and Traffic Office [Direction de la voirie et des déplacements]. Sanisette [automatic outdoor toilets] and Abribus [bush shelters] belong to a distinct market.

**MF:** In Paris, how is the location of street furniture pieces and Vélib stations decided?

AD: The location of Vélib station is not linked to that of JCDecaux's street furniture. The former are installed first with concern to the urban landscape of Paris, as set by the Architectes des Bâtiments de France (National Architectural Conservation Authority). This is why a great number of stations are located not on the main roads but on their adjacent streets. Thereafter, in the second phase of implementation, the rationale of traffic flow partly imposed. Between JCDecaux, the different municipal management boards, experts, etc. at least six parties take part in the process deciding on the location of a Vélib station. The municipal Street and Traffic Office [Direction de la voirie et des déplacements] systematically initiates the process but final decision is taken by the political authority. Between beginning and end there is a lot of back and forth among stakeholders.

**MF:** If Vélib was a media product, how would you interpret it?

**AD:** I think that Vélib is at the same time an international brander for Paris and, via the aesthetic of its design (materials, colours, forms, etc.) an expression of JCDecaux's values (quality, aesthetic, maintenance, etc) and culture. By calling on the service of worldwide known designers and architects, JCDecaux counts on the worldwide and local aesthetic acceptance of its products. By integration and adaptation, we attempt to make them an integral part of the identity of the cities in which they are installed. This is the reason why, by changing some aesthetic details, our standardised product Cyclocity has for each city a local customised version.

# JCDECAUX, URBAN PUBLIC SPACE AMENITER AND ANIMATOR

**MF:** How does JCDecaux perceive/conceive its relation to its city clients?

AD: JCDecaux is not only a street furniture vendor, but foremost a guide to urban development and its imaginary. Knowing that our contracts last between 10 and 20 years, and if we want to renew them and win new ones, it is crucial for us to foresee the street furniture and mobility trends. Even though we are not architects, we clearly see ourselves as an actor of urban development. We want to embellish cities and to install equipments and services as sustainable as possible and that are used by as much people as possible. As the market changes, JCDecaux and its activities too. Somehow, whether in a city, a mall or an airport, the profession of JCDecaux is to amenity public space and to animate it. Today for instance, if such public places are not equipped with digital screens displaying informations to users, they appear outmoded. Besides, for us, advertising is the backbone enabling the development of these urban services. Obviously, the company is a partner to local authorities. The birth of a new product always merges the creativity of an entrepreneur and the vision of a politician.

MF: Does not JCDecaux also produce something else?

**AD:** JCDecaux collects a considerable amount of data, digital or not, generated by the movement of persons and of our products. Eventually, the company can also provide statistical analyses able to influence municipal decisions.

MF: Where JCDecaux has its equipments installed, the company possesses, produces and uses very accurate maps of cities for operational and strategic purposes. Thanks to computerisation and geolocation, these maps could have become dynamic, and not static anymore. What can you tell me about this instrument that is much envied by others?

AD: Indeed, our in-house cartography service works on city and neighbourhoods maps in order to make these more intelligible. They

have to put in the foreground cultural places, transportation means and many other information and make them easy to read. Our maps are today used with service-related applications provided either for our pieces of smart street furniture or for smartphones. The app AllBikesNow whose function is to show the availability of bikes at stations is today downloadable for all smartphone types.

# 7.1.5. Interview with Martin Tironi

#### Mr. Martin Tironi

PhD candidate, Center for Sociology of Innovation, Mines ParisTech. Thesis: "Users, technology, and sustainable mobility: the case of self-service bicycles in Paris". Supervision: Antoine Hennion and Madeleine Akrich. Interview done on May 14th 2013 in Paris.

Matthieu Floret: How can bike-sharing be analysed?

Martin Tironi: Vélib is a manifold object, subject to various interpretations. Depending on your point of view, different notes appear to the observer. For instance, for entrepreneurs it is an innovative mobility service. On the other hand, for maintenance workers, it is a perpetual challenge with constant problems, breakdowns and failures needing to be fixed.

In my working paper, I show that there are two main ways of understanding Vélib, which are besides indirectly reflected in the manner how the debate on Vélib in its project phase unfolded. On the one hand, you can choose the 'mobility turn' which takes mobility not only as a transportation issue but as a way of life articulated around the movement of people, capital, goods, ideas, etc. Researches following on this paradigmatic shift are interested in the activities and behaviours caused by movement as well as in the type of reality generated by interactions with new urban infrastructures. In France, this turn has been taken by Georges Amar who defines the paradigm of mobility as based on the "mobile, multimodal and communicating person, coconceiver and co-producer of his/her own mobility". The other posture critically approaches the phenomenon. From this position, by showing how the multiplication of public-private partnerships have led to an increasing number of private actors to be integrated into urban decision-making processes, cities have become the favourite places of "capitalistic management". Some authors even talk about a dynamic of "neoliberalisation of urban space", and, as Maime Huré did with its bike-sharing schemes analysis, condemn the privatisation of a free-ofcharge urban activity hidden behind an environmentalist façade.

**MF:** However, your approach is different.

MT: Yes, indeed. Before Vélib was implemented, the question about how to make Paris become a "sustainable city" was controversial. My research work avoids preconceived ideas and aims at finding out how the object Vélib, going through controversies, ends up like it is by studying the actors' discourses and actions. In my thesis, I try to exhaustively reproduce how the actors understand the notion of ecology. I focus in particular on the immobiles of mobility. By that I mean that to production of mobility requires very precise and very local know-hows. Thus, my research analyses the work done by maintenance operative to articulate, produce and reproduce mobility. To me, these persons are true entrepreneurs and sociologist of urban space, meaning that from the signs, marks and events of the city, they ethnographic-like work to understand what's going on. They are permanently in a position of investigation. Thanks to their knowledge, know-how and every day contact with the city and service users, maintenance workers become true urban mobility innovators. Much more than mere information carriers to be applied on the field or solely middlemen between designers and service users, maintenance workers defines anew their own action and users, the urban environment and the interconnections in between. Moreover, it is through their eyes that we can get a very interesting view on service users. I posit the hypothesis that Vélib is a very fragile social and material system. This is the reason why I think that a constant updating work is necessary to understand what an ecological socio-technique system really is.

**MF:** How do you explain the success of Vélib in the end?

MT: Before, you have to tell why Vélib' opponents, the Parisian Greens, lost the dispute. Their approach criticised the capabilities of the future Vélib and condemned the neoliberalisation of public space. It was simply to difficult for them to dislocate, to split up the notions of "shared bicycles" and "sustainable city" in their line of argument. They could not do it. On the other hand, the promoters of the bikesharing project won the dispute not only thanks to the environmental discourse that they used and which drew a lot on the mobility turn literature in social sciences, but above all because they succeed in materially translating this discourse through the implementation of

Vélib itself. The socio-technical controversy enabled beforehand to synchronise and to put to the test the materialisation of this discourse.

MF: In your paper entitled "How to describe bike-sharing infrastructures? The controversial set up of Paris' scheme Vélib" [my own translation], you explain: "the dispositif Vélib' became successful thanks to the work of description and translation of the "sustainable city" which realised an infrastructure making materially visible (thousands of bikes scattered throughout the city for one Euro per half-hour) the dream of a sustainable urban development for the City of Paris" (2011: 17; my own translation). Is then the "success" of Vélib rather due to the effects of a mise-en-scène of the "sustainable city" discourse, a bit like a theatre performance whose stage would be the public space of the city, than to the quantitatively measurable impact that the use of Vélib could have for instance on the modal split?

MT: Exact.

MF: I would like to go further in this direction. Later you also say: "However, we can assert that the manifold descriptive practices used on the new bike-sharing technology have to be considered from their constituent or performative characteristic (Mondada 2000), meaning that they contributed to configure and make perceivable what the Vélib-Paris would be" (2011: 17).

MT: Yes. For Vélib' promoters, it is about the offer and the usage of new mobility services, sensitive experiences and types of urban interactions corresponding to their vision of a "sustainable city". To make that happen, JCDecaux, an outdoor advertising multinational company, is the ideal ally of Delanoë. Finally, despite the first intention of making a public service of mobility, my idea is that Vélib' has become an experiment process for conceiving urban ecology, flow management (humans and bikes), etc. Basically, I ask the question how Vélib has become a laboratory in retrospect. But for you, according to what you told me about your research, I'd advise you to focus in particular on the place and role of the sensitive dimension, the sensory experience as analytical and programming category in urban planning and development following the idea of "sustainable city".

# 7.1.6. Interview with Olivier Pégard

#### Mr. Olivier Pégard

Associate Professor/Senior Lecturer in sociology at the Université Paris-Est. His main research interests deal with leisure, entertainment, consumption and sports in urban contexts. Interview held on May 14th 2013 in Paris.

**Matthieu Floret:** How is it possible to interpret the bike-sharing and street furniture phenomena with the help of social theory?

Olivier Pégard: I think we have to look at how the topic of design and designers is dealt with in North America. Over there, there is a true reflection on objects in the educational curriculum of industrial designers. What is important is not to reflect on street furniture but to develop a thinking on the notion of object. Regarding a sociological, or even socio-political, approach to the notion of object, Jean Baudrillard produced a very important corpus of knowledge. According to him, every object generates a process of transformation, a treatment, which implies that objects does not only display passive content. An incentive to establish a certain form of relationship and of behaviour with itself is produced by the object. Finally, objects are never neutral. This position is also endorsed by Jacques Ellul who showed that the search of an object's usage real efficacy is sometimes blinded by a "technophile" preference.1 In the cinema, Jacques Tati also constructs a techno-critic, like in his movie "Mon oncle" [1958]. In Germany, we can notice the work of Günter Anders (The Outdatedness of Human Beings, 1956). In other words, right in the middle of the "Trente Glorieuses", right at the heart of consumption society, the world of objects appears as a political agent operating social usages and practices.

<sup>&</sup>lt;sup>1</sup>Jacques Ellul, Technology and Society, 1954/1968, and A Critique of the New Commonplaces, 1966/1968.

MF: This is what Bruno Latour says in Paris: ville invisible (1998).

**OP:** Yes, indeed. But before Latour, one must first not forget Pierre Sansot (1928-2005), French ethnologist, sociologist and philosopher, and his senses-based approach to urban experience and objects of the city (Poétique de la ville, 1978, Jardins publics, 1994, etc.). Next, consider Michel Foucault and his researches on power. In the gravitational field of Foucault, one finds the CERFI (Center for Institutional Study, Research, and Training, 1967-1987), a research community in humanities founded by Félix Guattari. Two of its members, François Fourquet et Lion Murard published 1976 Les équipements du pouvoir in the n°13 of the journal Recherches. From there, in addition to the notion of object, that of equipment can fuel the reflection on street furniture. Historically, the idea of equipment is a military wording stemming from navigation; to equip a vessel means to make it relatively autonomous to appear effective. The soldier's equipment is the kit composed by a bag, food ration, a shovel, etc. enabling him/her to become an autonomous agent digging a trench, feed him/herself, rest. To draw on Foucault about power, equipments manage, treat, care, support the population; as a kind of "mothering repression". Seen this way, equipments also acts as a force of interpellation, synonymous of police. In his 2001 book Le ludique et le policier, Jean Baudrillard explains that repression in civilised countries happens through the creation of ambiances.

**MF:** How to think about object and equipment in regards to urban public space?

**OP:** On can ask him/herself to what extent street furniture constitutes an interpellation or attraction force. My empirical case study of the bus shelter reveals that there is no explicit intention to frame, manage and control. Whereas for the private company who installs and maintains this piece of street furniture, it is merely a medium for commercial billposting, local councillors consider it as a high quality public service. It is then the convergence of both intentions that produces effects.

**MF:** What about street furniture providers like JCDecaux in the whole picture?

**OP:** What is particularly interesting about JCDecaux are their super accurate city maps to locate their products. This help them to ensure the maintenance of their equipment, necessary condition of their success. In addition to its core business, JCDecaux produces a lot of statistical data on urban space and its dynamics.

**MF:** In your paper L'Abribus, un procédé performatif dans la circulation de l'ordre et des images, the category of aesthetics occupies an important position. How would you define this category, applied to objects and equipments located in public space? And what qualities would they have?

**OP:** First, aesthetic signifies beauty (colouring, form, design), efficacy and its representation. However, due to the consensual power of beauty, aesthetics accelerates the acceptance of dispositives structuring urban public space. In this way, design is a performative tool. When applied to my analysis of the bus shelter, aesthetic qualities are those of comfort, security and hygiene, together expressed in relationship to the set up of an ambiance. If one observes Vélib, one notices that the three qualities that I mentioned are present, to which one can add values such as individuality, mobility, spontaneity, etc.; in short, Vélib exemplifies the contemporary urban individualism Zeitgeist: young, jolly, efficient. Vélib does not invent biking, it conceives a service producing the satisfaction of cycling without the constraints of maintenance.

# 7.2. Coalition of interests behind the implementation of a bike-sharing service

## The example of New York's Citi Bike

Setting up a BS service is a matter of partnerships. The coalition of interests that enables an end-user to enjoy its bike ride from one docking station to the next gathers various categories of actors. Schematically, we have: primarily, the project's initiator, the owner, the sponsor or funder, the provider, the operator; and secondly, the software developer, the hardware developer, the bike's and station's designer, the advertising and communication agency, the researchers, the manufacturers, the technical and cleaning maintenance, and the hotline service.

New York City's bike-share scheme *Citi Bike* (http://www.citibikenyc.com) opened to public on May 27<sup>th</sup> 2013 with a number of 330 stations and a fleet of 6000 bikes. Stations are located in Manhattan south of 59<sup>th</sup> Street and in Brooklyn north of Atlantic Avenue and west of Nostrand Avenue, before slated expansion.



Photograph source: http://www.fastcompany.com/3012602/fast-feed/new-york-citys-bike-share-hits-100000-rides (top background banner)

Initiator	The initiative was taken by Michael Bloomberg, Mayor of NYC, and taken in charge by the municipality's Department of Transportation.
Owner	Public-private partnership, but not clear to who owns what.
Funder / Sponsor	Citi Bank, founded 1812 as the City Bank of New York, is the consumer banking division of Citigroup, an American multinational financial services corporation headquartered in Manhattan and global player of the world's finance. As title sponsor, Citibank pays \$41 million over the first five years in order to have the right to brand NYC's bike share scheme with its name and logo.  Besides NYC, London's and Moscow's BSSs are also sponsored and branded by banks.
Supplier / Provider / Vendor	Public Bicycle System Company (PBSC; http://www.publicbikesystem.com) is a private non-profit company whose title sponsor is Rio Tinto Alcan, the Montréal-based Canadian global leader of aluminum mining and production, and overseen by Stationnement de Montréal, a quasi-public organisation serving as the Montreal Parking Authority.  Besides NYC, PBSC provides the cities of Montréal, Boston, Chattanooga, London, Melbourne, Minneapolis, Ottawa, Toronto, Washington DC and Chicago with its equipment.

#### Operator

NYC Bike Share LLC, the local 100% subsidiary of Alta Bicycle Share Inc. (http://www.altabicycleshare.com), a privately held transportation company based in Portland, Oregon, and whose main activity is "designing, deploying and managing bicycle share systems, around the world. [...] Deployment, operations and system marketing are our core competencies".

Besides NYC, Alta is in charge of the schemes of *Melbourne Bike Share* in Australia, *Capital Bikeshare* in Washington D.C., *Hubway* in Boston, *Bike Chattanooga* in Tennessee, *Divry* in Chicago, *Bay Area Bike Share* in California, and *COGO Bike Share* in Columbus, Ohio.

(Source: <www.altabicycleshare.com/about>, <www.altabicycleshare.com/locations>)

# 7.3. Author's Curriculum Vitae

# CURRICULUM VITÆ

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Personal information	(August 2014)
First name(s) / SURNAME	Matthieu, Ralph FLORET
E-mail	matthieu.floret@wanadoo.fr
Education and training	
01/10/2012 - 31/01/2013	<b>Urban Design Studio</b> "Skopje Architecture Week", Master Architecture Vienna University of Technology
01/10/2010 - 30/11/2014	Master of Arts in Political Science at Vienna University
13/07/2009 - 26/07/2009	Serbo-Croatian language course, elementary level (A1-A2), Belgrade Summer School 2009
01/09/2008 - 27/09/2014	Master of Arts in Urban Studies at Brussels, Vienna, Copenhagen and Madrid Universities
01/10/2005 - 30/09/2006	Bachelor degree (Licence) in Law and Political Science at Paris University
01/10/2003 - 30/06/2005	Undergraduate studies (Bi-DEUG) in History, Sociology and Anthropology at Paris University
Professional experience	
10-14/06/2014	Urbanist
04/2014 01/07/2013 – 31/12/2013 01/03/2012 – 31/12/2012	(2014-2) Exhibition "Uneven Growth: Tactical Urbanisms for Expanding Megacities", MoMA + MAK. For City of Vienna, collaboration with "kon-text" office: (2014-1) audit "Comparison of local and supra-regional functional and socio-spatial analyses"; public space's Functional and Socio-Spatial Analyses "Stadterweiterung" (2013) and "Schwedenplatz-Morzinplatz" (2013).
04-13/10/2013	Event management assistant at Vienna "Urbanize!" international festival for urban investigation
01/05/2013 - 30/06/2013	Translator (FR<->DE) in the domain of building physics and sustainable construction engineering
01/07/2008 - 31/08/2008	Internship in the political section of the French embassy in Serbia
01/07/2006 - 30/09/2006	Internship in the Paris special liaison mission of the International Organization for Migrations
01/10/2003 - 31/12/2011	Encoder; waiter and barman; ski instructor; bike messenger; French language lessons
Personal skills and competences	
Languages	French and German (mother tongues), English (C2-C1), Serbo-Croatian (B1-A2)
Computer skills and competences	Office: text, presentation, tables; OS: Linux, Windows
Driving licence(s)	В
Additional information	<ul> <li>Publication: "meanwhile in Skopje: between the straitjacket of memory and the imperatives of modernity." http://globalurbanist.com/20/21/0109/skopje-architecture</li> <li>Stays abroad between July 2008 and June 2010: 2 months in Belgrade (Serbia), 5 months in Brussels (Belgium), 4 months in Copenhagen (Denmark), 3 months in Madrid (Spain).</li> <li>Regular trips, excursions and short stays in the Balkans between 2005 and 2012: Romania, Serbia, Croatia, Bosnia-Herzegovina, Macedonia, Kosovo, Albania, Montenegro and Bulgaria.</li> <li>Theatre; rugby, climbing, ski, yoga, equestrian, etc.</li> </ul>

