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### Publication Date

2017

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The Politics of Immediacy:  
Citizenship, Infrastructure and Sustainable Mobility in Mexico City

By

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A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

City and Regional Planning

and the Designated Emphasis

in

Global Metropolitan Studies

in the

Graduate Division

of the

University of California, Berkeley

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Professor Teresa Caldeira, Chair

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Summer 2017

The Politics of Immediacy: Citizenship, Infrastructure and Sustainable Mobility in Mexico City

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## Abstract

The Politics of Immediacy:  
Citizenship, Infrastructure and Sustainable Mobility in Mexico City

By Oscar Sosa López

Doctor of Philosophy in City and Regional Planning

University of California, Berkeley

Prof. Teresa Caldeira, Chair

The dissertation examines the development of sustainable transportation policy in Mexico City. It argues that while sustainable transportation interventions have been defined as examples of a commitment to democratic planning and redistribution of infrastructure investment, in practice these projects have been implemented in a top-down fashion, legitimized by a handful of experts and have targeted only a handful of central districts. The implementation of these reforms are enabling the re-valorization of central neighborhoods and generating new forms of privatization and spatial inequality. The inequality produced is not only spatial. Sustainable transportation initiatives also produce differentiated publics, reducing participation to a handful of non-state actors, namely, experts and international NGOs.

I develop these claims through the analysis of Metrobus, the city's BRT system, the bikeshare system Ecobici, and a street parking management program called Ecoparq. I draw on ethnographic evidence collected in Mexico City over 16 months in 2012 and 2013 consisting of extensive in-depth interviews with over 60 city officials, transportation experts, NGO staff members, social movements activists and citizens. I use this data to analyze *política de movilidad* as a policy space in which multiple actors within and outside the state have come together to redefine the goals, mechanisms and technologies used to plan and implement transportation infrastructure.

I draw on the metaphor of immediacy to analyze the practices that make possible these sustainable transportation projects and bring attention to three important policymaking practices and their effects. First, I argue that the need for an immediate response to environmental crises is generative of new policies that must be implemented quickly by bypassing existing bureaucratic and political structures. Second, I show how first-hand, immediate, experience is as an important temporal-spatial dimension of policymaking. By building pilot projects that appear successful and can make sense to any resident, city officials minimize conflict and bring legitimacy to controversial interventions. And third, I propose that the metaphor of immediacy complicates understandings of the role that infrastructures play in shaping public debates around green futures. Movilidad projects postpone inclusive planning processes in which planners could mediate debates in which citizens, experts and officials co-decide how to make the city more sustainable and democratic.

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## Acknowledgments

This dissertation marks the end of a long process that I could not have been able to complete if it weren't for the many forms of support, mentorship and friendship which I received.

My main advisor, Teresa Caldeira has provided mentorship in ways that I am sure she doesn't even realize. The combination of sharp feedback on my writing, incisive advice on all things academia and her patience have been fundamental to my training as a scholar. I hope to soon reach the potential that she sees in my work. Michael Dear has also been an essential person in my training. Don Michael, like nobody else at Berkeley, has showed me what it means to be a committed researcher and professional educator and, just as importantly, to have fun at it. Alison Post has been a great external advisor, always willing to bridge disciplinary silos and find ways to make my work more interesting to those outside of the planning world.

While their signatures are not on this document, there are other names that deserve special mention. Ananya Roy was an amazing mentor whose feedback has always made my work better. Ananya taught me to take knowledge production as a political project and showed me the power and responsibility that comes with an academic post. I also owe Karen Chapple and Malo Hudson a lot for their mentorship and continuing support and friendship over the last few years. I also want to thank my first academic mentor, Rafael Alarcón who, sometime in the early 2000s, first suggested and encouraged the idea of pursuing a degree at DCRP.

If I could, I would change a lot of things about my graduate school experience. But one thing I would leave unchanged is the people that I found while at Berkeley. Sergio Montero, Anna Goodman, Sophie Gonick, Aditya Potluri, Julie Gamble, Pedro Peterson, Hun Kim and Alex Schafran are all amazing colleagues, friends, mentors, co-conspirators and, for lack of a better term, family. Matteo Stiglich, Matt Wade, Erick Guerra, Gautham Bahn, Jake Wegmann, Diego Canales, Alissa Kronovet, Jme McLean and Max Richardson also made this journey more interesting and fun.

While conducting fieldwork in Mexico City I also received a lot help. My research would not have been possible without the support of Manuel Perló and the IIS-UNAM. Sonia Doltuskaya, Priscilla Connolly, Luisa Rodriguez, Salomón Gonzales, Margarita Pérez Negrete and Boris Graizbord treated me as a colleague from the beginning and always pointed me to the right sources.

I cannot express my gratitude and respect to every single person that I interviewed. I spent hundreds of hours talking to and shadowing transportation experts, activist, neighbors and city officials and want to acknowledge not only their disposition to share their time with me but also, and especially, their commitment to make Mexico City a better place. While we might not always agree on the means to reach them, I do think we have a few goals in common that I would love to see realized.

My time in Mexico City conducting fieldwork was also a moment to re-discover my own city in all its complexity. Those were amazing months that I am glad I got to share with Aarón, Champi and Luis "Bustarhymes". During the long process of writing this document I neglected a lot of friends, who I often failed to keep in touch with but were constantly in my thoughts: Aaron Salinger,

Fiamma Montezemolo, Tarek Elhaik, Kirk Quitter, Sergio Contreras, Hugo Salgado, Amaranta Caballero and Minerva Reynosa. In the brief time I spent in Providence I was also lucky to make many new friends that made the writing a lot more bearable. Michael Rodríguez-Muñiz, Deepak Lamba-Nieves, Tatiana Andia, Everaldo Lamprea, Maritza Paredes, José Carlos Orihuela, Tomasito, Alicia Ringel, Cedric de León, David Levy, Aisalkyn Botoeva, Gianpaolo Baiocchi, Patrick Heller and José Itzigsohn are at the top of that list.

This degree would not be possible without the love and support of my family: Patricia, Ramón and Sonia. I cannot thank them enough for this and every other good thing in my life. And lastly, I want to thank Diana, the most extraordinary person I came across during fieldwork. This dissertation would not be half as good without you.



## Acronyms

AEP	Autoridad del Espacio Público - Public Space Authority
CTS	Centro de Transporte Sustentable - Sustainable Transport Center
EMB	Estrategia de Movilidad en Bicicleta - Bicycle Mobility Strategy
GEF	Global Environmental Facility Program (World Bank)
ITDP	Institute of Transport and Development Policy
PRD	Partido de la Revolución Democrática - Democratic Revolution Party
PRI	Partido Revolucionario Institucional - Institutional Revolution Party
SEDUVI	Secretaría de Desarrollo Urbano y Vivienda - Secretary of Housing and Urban Development
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales - Secretary of Environment and Natural Resources (federal)
SEMOV	Secretaría de Movilidad - Secretary of Urban Mobility (formerly SETRAVI)
SETRAVI	Secretaría de Transporte y Vialidad - Secretary of Road and Transport
SMA	Secretaría de Medio Ambiente - Secretary of the Environment
SOBSE	Secretaría de Obras y Servicios - Secretary of Public Works and Services
UNAM	Universidad Nacional Autónoma de México - National Autonomous University
WB	The World Bank
WRI	World Resources Institute

# Chapter 1. Introduction. Sustainable Mobility and the Assemblage of a New Policy Space: Infrastructure Citizenship and Inequality in Mexico City

## 1.1. Introduction

In the last 10 years Mexico City officials have embarked on a series of ambitious projects with the objective of transforming the city's public transportation sector and the overall condition of its transportation infrastructure. These transformations began with the implementation of the first Bus Rapid Transit (BRT) corridor in the city along Avenida Insurgentes in 2006 and continued with the subsequent expansion of the Metrobus BRT system, the inauguration of a bikeshare system and a series of pedestrian improvements.

In 2014 these efforts were institutionalized when the city approved a new transportation law, the *Ley de Movilidad*, which among other things renamed the transportation agency, *Secretaría de Transporte y Vialidad*, to *Secretaría de Movilidad* and created a new sub-agency for sustainable mobility planning called *Subsecretaría de Movilidad*. At the center of these reforms and upgrades are city officials and a handful of non-state actors—NGOs, transportation experts and global philanthropy and international development institutions—who have been promoting the adoption of green technologies as well as new understandings of what constitutes transportation and what it should do for the city and its inhabitants. Proponents of these recent transportation reforms have borrowed from “the sustainable mobility paradigm” (Banister 2008). This paradigm emphasizes qualitative dimensions of urban travel and embraces issues such as social inclusion, citizen participation and affordability along with environmental and financial sustainability as indispensable components and desirable goals of transportation projects. As such, sustainable mobility policy, called *política de movilidad* in Mexico, has been defined as central to a rights-expanding agenda that will help redistribute investments and improve the quality of transit systems and sidewalks, benefiting individuals of all incomes and improving the environmental conditions for all citizens. Various projects defined as *política de movilidad* have captured the imagination of local and global policymakers, planners, scholars and activists, and today Mexico City is widely considered a hotspot of sustainable transportation innovation.

In this dissertation I examine three innovative projects that led to the creation of the new *movilidad* law and the renaming of the transportation agency in order to understand how sustainable transportation infrastructure is produced and what are its effects on the city's physical, social and political landscapes. The analysis is guided by two overarching questions: 1) How are sustainable transportation interventions conceived and implemented in the face of skepticism and entrenched political and institutional challenges? 2) What effects do these infrastructure projects have on dynamics of inequality, informality and spatial difference?

I argue that despite the claimed success of *política de movilidad* in the face of political challenges, sustainable transportation projects have been implemented in a top-down fashion, have arrived as a handful of best practices legitimized by experts and executed through public private partnerships. These projects have demanded not only technological upgrades, such as high-quality buses and electronic parking management systems, but also a series of controversial governance reforms that introduce market logics and grant the private sector a central role in the provision of transportation

infrastructure and services. Moreover, the implementation of these reforms have enabled the revalorization of central neighborhoods generating new forms of spatial inequality. The effect of these infrastructure projects is not only spatial. Sustainable transportation interventions also produce differentiated publics and a stratified infrastructural citizenship. In short, sustainable mobility projects, rather being redistributive, have created new forms of infrastructure inequality in the city.

I develop these claims through the analysis of Metrobus, the city's expanding BRT system, the development of non-motorized transportation infrastructure, in specific, the bicycle share system Ecobici, and the implementation and expansion of a street parking management program called Ecoparc (smart parking meters). While the projects are different in their inception, implementation process and effects, they all were implemented under the umbrella of *política de movilidad* and indeed helped to construct this as a unique policy space.

## **1.2. Política de Movilidad as a Policy Space**

Política de movilidad is redefining the role that transportation plays in shaping the quality of life of urban dwellers. Traditionally, transportation planning had been focused on efficiency (Banister 2008) but the sustainable mobility paradigm that informs política de movilidad is concerned with the qualitative dimensions of the urban transportation, such as the quality trips, their environmental impact and who gets to participate in transportation planning (Lucas et al. 2008; Sagaris 2010). The appearance of política de movilidad in urban planning discussions has been accompanied by a pluralization of policy actors that influence transportation agendas. Today experts, local and international NGOs and activists use global best practices to promote their agendas (Sosa López and Montero, n.d.). For instance, sustainable mobility proponents often point to cities such as Bogotá, Medellín or Curitiba to argue that that investment in better mass transit systems can reverse long-seated inequalities and generate the conditions for safer, inclusive and economic success. Adopting movilidad, in other words, means enacting a series of institutional reforms and cultural shifts in order to position transportation as a central component of an agenda aimed at the construction of sustainable, livable and inclusive cities.

In this dissertation I draw on interpretative policy analysis scholars (Yanow 1996; Wedel 2005; Shore, Wright, and Però 2011) to examine these new dynamics of urban policymaking. Interpretative policy analysis scholars argue for taking public policy as an object of critical analysis and invite scholars to,

“explore the cultural and philosophical underpinnings of policy-its enabling discourses, mobilizing metaphors and underlying ideologies and uses.... explain how taken for granted assumption channel policy debates in certain directions, inform the dominant ways policy problems are identified, enable particular classifications of target groups and legitimize certain policy solutions while marginalizing others” (Wedel 2005, 34).

Some of these scholars also conceptualize policy as an assemblage of management technologies, economic logics and discursive (cultural) elements that comprise a field of action and shape practices of and relations between actors within and outside of the state (Shore, Wright, and Però

2011). The goal of this approach is to deconstruct policymaking in order to reveal patterns and processes in the organization of power and governance (Shore, Wright, and Però 2011, 14:4). Taking up these suggestions, I conceptualize política de movilidad as a *policy space* that should be studied not only as a new institutional arrangement but as an emergent and relational process with multiple articulations, contradictions and temporalities through which relationships of power are re-constituted (Yanow 1996). My understanding of policy space also borrows from work in geography that pays attention to how policies are made of relations and networks that extend across multiple sites and scales (Robinson 2006; McCann and Ward 2011). Thus, in this dissertation policymaking is a process that spans across multiple institutions, geographical sites and spheres of public life in which contingent relationships of power between city officials, development experts, activists and ordinary citizens are played out. This space is continually shaped and reshaped as projects are legitimized and promoted as feasible (as the bikeshare system in Chapter 4); are subverted, translated and given new meanings (as the BRT in Chapter 3) or are contested (as the parking program in Chapter 5).

As I will show, política de movilidad did not come to exist abruptly in 2014 but instead was assembled over a period that spanned over a decade. In this period, different projects materialized aspects of a comprehensive reform that aims to introduce technocratic logics into the highly politicized transportation services and infrastructure planning sectors. At their core, these reforms aim to change the provision and management of transportation infrastructure from a highly centralized process that responds to clientelistic and political needs of the city government to a technocratic mode of managing investment in which city officials collaborate with international development institutions, the private sector and a select group of civil society actors. In these processes, new actors and matters of concern have been introduced and these, in turn, have transformed the meaning of policy, the form in which interventions are planned and the metrics through which the success of projects is evaluated. I develop this analysis in Chapters 3, 4 and 5.

### **1.3. The Context and Contours of Política de Movilidad**

Four distinct dynamics intersect within the Mexico City's política de movilidad policy space: the increasing pluralization of policy actors, transport-land use mismatch, institutional fragmentation in environmental policy and the emergence of climate change as a matter of global concern.

The last two decades have brought important transformations in the context of urban politics in Mexico City. On the one hand, there has been an increased relevance of non-governmental actors, organized private interests (Davis 1994; Crossa 2009) and citizen groups that are participating directly in the shaping of urban development agendas (Roberts 2005; Álvarez 2006; Ziccardi 2009). The pluralization of actors is partly the result of democratization (Fox 2008; Snyder 1999; Cornelius, Craig, and Fox 1994; Cejudo 2008). This protracted processes increased pressures from all sectors of society (Fox 2000) and is characterized by the formalization of certain forms of civil society in the form of institutionalized technocratic accountability mechanisms (Dagnino 2007; 2003). In Mexico City, the opening of spaces for non-state actors in policymaking has been framed as a distinct project of the left-leaning party Partido de la Revolución Democrática (PRD) whose origins are linked to social movements, and which has been in power since the democratization of the city in 1998. In practice, PRD mayors have shaped local governance around contradictory

measures that attempt to build new governance structures based on progressive ideas such as participatory governance, transparency, accountability and an emphasis on social policy but that often also give continuity to corporatist-clientelist political arrangements inherited from the Partido de la Revolución Institucional (PRI) period.

A second dynamic that shapes the política de movilidad is related to the political-structural origins of Mexico City's transport-land use mismatch. This mismatch consists of the lack of coordination between land use planning and transportation planning and service provision which, ideally, should complement each other (Giuliano and Hanson 2017). As Diane Davis (1994) argued in *Urban Leviathan*, Mexico City's urban development patterns were the result of the PRI regime's capacity to respond to demands from different sectors of Mexican society. The PRI accumulated political capital by making land and infrastructural investment available to capitalists and industrialists on one side while also catering to urban and migrant poor by allowing informal development in the peripheries. It was through this practice that Mexico City's officials resolved many of the pressures and tensions of the developmentalist project and corporatist PRI regime. However, by politicizing land and infrastructure the PRI also generated the conditions for sprawl and a culture of lax land-use enforcement and little long-term planning (Iracheta Cenecorta 2010). As will be discussed at more detail in Chapter 2, transportation policy has followed a similar path, with several cycles of public control, privatization and deregulation that historically have responded to different political demands and constraints. For example, since the 1990s the city has seen a massive growth of semi-unregulated bus services, in part as a result of liberalization and in part due to a systematic reluctance of city officials to engage in direct conflict with bus owners.

A third set of issues is related to the challenges associated with implementing environmental management legislation in Mexico City. For many decades, Mexico City has suffered extreme congestion and environmental problems (Legorreta and Flores 1989; Salazar and Lezama 2008; Lezama and Graizbord 2010). Scholars have identified these problems as the result of the city's position as capital of a nation that adopted an import substitution industrialization development model and concentrated wealth production in a small number of cities (Portes and Roberts 2005). Actions to address environmental degradation began as early as the 1970, but there is ample evidence that these actions have not been effective (Molina and Molina 2004; Hardoy and Romero Lankao 2011). There are several issues that have contributed to this situation but one plays a central role: de-centralization. As scholars have shown, in Mexico decentralization has not always been accompanied by a corresponding strengthening of local level institutions which has led to weak governance and inter and intra- agency competition (Fox and Aranda 1996; Williams 2001). This situation is exacerbated by a high turnover of staff and lack of policy continuity between administrations. In Mexico City, decentralization and fragmentation have made it extremely difficult to implement effective environmental plans, especially considering the large number of municipalities that make up the metropolitan area and the historical power struggles between politicians looking to position themselves for higher profile jobs in the federal administration (Williams 2001). At the same time, in recent years electoral competition has also prompted productive, if improvised, policy innovation. The result, as will be shown in this dissertation, is a policy space in which effective interventions are limited by large institutional and political constraints and where policy actors prefer to invest in low-scale and short-timeframe projects that

can be carried out in one administration at the expense of long-term and comprehensive planning (Moreno Jaimes 2007).

Finally, the rise of climate change as a global concern has transformed and re-focused urban environmental politics in Mexico. For instance, international development organizations such as the World Bank or the Inter-American Development Bank have become invested in transforming Mexico's obsolete transportation sector. Global epistemic communities of scientists as well as local experts (such as Mexican climate scientist and Nobel Prize winner Mario Molina) have also become important interlocutors in matters of urban development (Romero Lankao 2007). Similarly, global philanthropy has taken a particular interest in climate change adaptation and resilience and with this urban environmental management is also transitioning from a scientific matter to an area prime for a wide range of policy innovations such as institutional streamlining, the use of big data and crowd-sourcing, interagency coordination and other concepts common to urban innovation circles (like the C40 and the Bloomberg Foundation among others). On the other hand, traditional environmental activists, which in Mexico enjoy an important history of successes (Durand Smith et al. 2011), have also increasingly refocused their agendas and strategies to address urban sustainability issues, of which transportation is understood to be critical (Centro de Colaboración Cívica 2012). This is in large measure a response to the funding opportunities available in this moment of increased environmental concern.

With the expansion climate change as concern in Mexico an increasingly complex constellation of international actors, including international development banks, climate change epistemic communities, global think tanks and global philanthropic organizations, along with local civil society groups and government officials are competing and collaborating to influence urban planning and transportation policymaking. These actors are responding to global and local environmental concerns by piecing together a series of recognized sustainable mobility best practices and policy models from cities across the globe. As I have argued elsewhere, (Sosa Lopez and Montero, n.d.) *expert-citizens* have been particularly successful in becoming part of these discussions and, in that way, shaping the new transport policy agendas in Mexican cities. Examples of these actors are global think tanks such as the Institute for Transportation and Development Policy (ITDP) or Embarq (a subsidiary of The World Resources Institute) both of which have offices in Mexico City, but also local organizations such as the environmental NGO Colectivo Ecologista Jalisco (CEJ) from Guadalajara, which forged important international connections after receiving several Hewlett Foundation grants, or Bicitekas, Mexico City's oldest bicycle activism group, which belongs to a national and global network of pro-bicycle activism and expertise. These actors secure their participation in transportation planning processes by making the claim that they are non-state actors that represent the voice of local civil society, while at the same time mobilizing expertise on international best practices in the field of sustainable mobility.

In this dissertation I analyze política de movilidad in all of its complexity by drawing on work on green gentrification, urban political ecology, urban citizenship and the politics of infrastructure. The following section lays out my conceptual framework.

## **1.4. Conceptual Framework: Green Gentrification, Uneven Sustainable Development and Differentiated Infrastructural Citizenship**

### *1.4.1. Beyond Green Prescriptions: Transportation and Uneven Sustainable Development*

As the work on green gentrification and just sustainabilities has shown, greening improvements do not benefit city dwellers equally and often generate new forms of inequality and displacement (Agyeman 2005; Agyeman, Bullard, and Evans 2003; Greenberg 2013; Henderson 2013; Isenhour, McDonogh, and Checker 2014; Zavestoski and Agyeman 2014). Looking at different processes, authors have shown that much of the regressive effects of sustainable projects are the result of conditions that link green and sustainable infrastructures and amenities to economic and political demands of entrepreneurial urban strategies (Checker 2011; Isenhour, McDonogh, and Checker 2014; While, Jonas, and Gibbs 2010) as well as participatory planning procedural deficiencies (Corburn 2005). Sustainability injustices can manifest in different aspects of urban life, including the design of public infrastructure (Lubitow and Miller 2013; Zavestoski and Agyeman 2014) and the uneven distribution of natural amenities (Agyeman et al., 2003). A particularly productive area of research has been that of green gentrification, a process that Melissa Checker has defined as operating through “a discourse of sustainability which simultaneously describes a vision of ecologically and socially responsible urban planning, a “green” lifestyle which appeals to affluent, eco-conscious residents and a technocratic, politically neutral approach to solving environmental problems” (Checker 2011, 212). Green gentrification literature has shown the relationship between processes of displacement and livability improvements, which can include access to mass transportation, urban farming or access to other forms of green space (Curran and Hamilton 2012; Lubitow and Miller 2013; Wolch, Byrne, and Newell 2014). These works provide rich critical accounts of processes of urbanization, renewal and upgrading in the name of sustainability. These literatures, however, have certain limitations. The just sustainabilities framework, for instance, inherits from the traditional environmental justice framework a normative idea of what constitutes a sustainable city and tends to leave notions of justice and the same definition of sustainability largely unproblematicized. On the other hand, the green gentrification camp is limited by a definition of gentrification as neighborhood displacement that requires important adjustments when taken out of its traditional research sites (North America and Europe) and is applied in contexts with different spatial, social and political dynamics (Janoschka 2002; Janoschka and Sequera 2016; Ghertner 2015; 2011). Nevertheless, the insights of these literatures point to the importance of a critical perspective on the powerful narrative of sustainability as an urban strategy.

Insights from Urban Political Ecology (UPE) complement the gentrification and just sustainability frameworks in two ways. First, by conceptualizing cities as embedded in larger metabolic relationships (Gandy 2004; Heynen, Kaika, and Swyngedouw 2006; Kaika and Swyngedouw 2000; Heynen, Kaika, and Swyngedouw 2006) and processes of planetary urbanization (Angelo and Wachsmuth 2015), UPE provides a useful lens for the study of uneven development that avoids some limitations of the place-specific lens of neighborhood gentrification. Secondly, by calling attention to the socio-natural metabolic relations that make ecosystems, UPE also problematizes the idea of nature and “the sustainable”. Understanding how discourses of “nature” are mobilized and politicized is at the center of UPE concerns. Through this lens urban environmental governance is not the managing of an essential thing that we can call nature, but the social construction of flows, interdependency and uneven power relations around resources and livelihoods (Keil 2005, 2003).

UEP has produced important insights on the politics of water management, urban forests, air pollution and pesticides that complicate understandings of nature in the city and the relationship between nature, bodies, culture and politics (Kaika and Swyngedouw 2012). UPE authors have grouped greening policy with other spaces of neoliberal urban policy, such as competitiveness, security and creativity as one of the quintessential neoliberal strategies that exemplify consensual policymaking (Swyngedouw 2014, 2010).

In recent years, critiques of consensus-based and participatory planning and policymaking have led to the rise of the “post-political” as a lens to study the state of political affairs under neoliberalism. In urban studies, much of these debates have followed the work of Erick Swyngedouw, who, in turn, has followed Ranciere’s ideas about the post-political condition (Swyngedouw 2014). For Ranciere (2015), the post-political is a condition in which political decisions are not the result of process marked by dissensus and disagreement, which for him are the essence of politics. Instead, in the postpolitical moment policy decision are the result of processes driven by a the logics of neoliberalism that take the form of value free and technocratic rationales. Swyngedouw and related authors identify this condition in much of today’s urban strategies and governance schemes (Wilson and Swyngedouw 2014). For Swyngedouw, in fact, sustainability is in many ways the exemplary case of the post-political, given that “matters of concern (around sustainability) are thereby relegated to a terrain beyond dispute[...]and] scientific expertise becomes the foundation and guarantee for properly constituted politics/policies” (Swyngedouw 2007, 7).

This post-political framework is a welcomed interpretation that calls attention to the technocratic logics that permeate all aspects of urban governance, but one that so far has been unable to show empirically how democratizing agendas and entrepreneurial governance mechanisms coexist in the actually existing green city. In this dissertation I attempt to address this limitation by focusing on the *assemblage* of green infrastructure as a “useful way of interpreting and exploring the ways in which various different priorities may be negotiated in practice” (Cochrane 2010, 371). For instance, a relational understanding of urban politics (Jonas 2015) can illuminate how changing global discourses, such as current concerns around sustainability and climate change open possibilities for new urban coalitions and associations. Similarly, several urban scholars have attempted to conceptualize cities and policymaking processes relationally through the study of urban policy mobilities and inter-city referencing (Peck and Theodore 2010a; McCann and Ward 2012; Roy and Ong 2011). For instance, McCann and Ward (2011) have focused on how urban policy is co-constituted by both connections to other places and local political contestations. By providing a close examination of the forms of politics that undergird processes of uneven development, this dissertation aims to contribute to ongoing debates on the relationship between greening urbanism and uneven development as found in scholarship on just sustainabilities, green gentrification, and urban political ecology. However, here I put front and center the effects that sustainability and greening policies have on the city’s citizenship landscapes.

#### *1.4.2. Urban Citizenship*

Classic theorizations of citizenship define it as “a collection of rights and obligations which give individuals formal legal identity; these legal rights and obligations have been put together historically as sets of social institutions, such as the jury system, parliaments and welfare states” (Turner 1997, 5). A long standing preoccupation of scholars of citizenship has been examining the relationship between citizenship, rights, democracy, difference and inequality. (Marshall 1964; Hall



and Held 1989; Turner 1993; Marion 1990). For instance, a classic analysis of the evolution of citizenship in modern capitalist societies is that put forth by T.S. Marshall. Marshall, analyzing the evolution of citizenship in England, notes the introduction of different kinds of rights that have expanded citizenship and their effects. Marshall argues that the introduction of legal rights, which formalized national belonging and exclusion, led to the institutionalization of courts and legal resources that were necessary for capitalism. Subsequently, in the 18<sup>th</sup> and 19<sup>th</sup> centuries, political rights led to the creation of parliamentary institutions and the consolidation of liberal states. Finally, in the 19<sup>th</sup> and 20<sup>th</sup> centuries, and in response to class struggles, social rights were instituted and took the form of the welfare state (Marshall 1964; Turner 1997). Marshall argues that the evolution of citizenship has been marked by the need to solve tensions of capitalism through the institutionalization of mechanisms to reduce inequality, which at times are at odds with the democratic egalitarianism that liberal conceptions of citizenship presuppose (Marshall, 1981 in Turner 1997, 11).

The supposition of citizenship as a condition universally shared in equality by all members of a society has also been problematized extensively by the left and by feminist, critical race and post-colonial scholars (Goldberg 2002; Marion 1990; Mirafra 2004; Mouffe 1992). While these critiques take different forms, they coincide in their concern with the problematic relationship between collective identities and pluralization (Mouffe 1992). Or, as some authors have put it, the tension between universalism and difference, and more specific, on the exclusionary, impersonal and de-politicizing effects of liberal democracy in contemporary states and the risks of communitarianism and populism (Young 1990; Rancière 2006). These authors characterize citizenship as a regime based on oppression and a bureaucratic rationality that limits the possibilities of democracy and emancipation (Green 1999; Young 1990).

The limits of liberal citizenship exposed by T.S. Marshall and in more recent scholarship are a central preoccupation of contemporary urban research. Indeed, the re-configuration of economic, social and political borders that has accompanied globalization highlights the gap between formal rights granted by national membership to a nation-state and the everyday needs and struggles of individuals. Contemporary scholars have shown that citizenship is not a single condition but a series of overlapping, contingent and fluid regimes of inclusion and exclusion that are shaped by one's belonging to a particular social class, ethnic group, immigrant status, labor function, etc. For instance Alsaayyad and Roy (2006) analyze this fragmented citizenship through the lens of a "medieval modernity". Meanwhile, Ong (Ong 1999) speaks of a "flexible citizenship" to describe the differentiated, mutable and fragmented ways in which citizens have access to trans-national spaces and territories.

As authors point out, it is in cities where some of the most important effects of globalization are felt, from the forms of ethnic and cultural diversity that accompanies international migration (Portes 2000), to the polarization of labor markets (Sassen 2001) and the overall explosion of cultural and political identities that technological advances have made possible (Holston and Appadurai 1996, Appadurai 2002). In this context, the city has become a strategic vantage point from which to analyze citizenship (Holston and Appadurai 1996).

The concept of urban citizenship allows us to rethink how is it that urban life is affected by the processes of re-territorialization that accompany globalization, how cities remain the strategic arena for the development of claims and how cities make evident a series of conditions that shape substantive rights that are not necessarily included in formal citizenship (Holston and Appadurai 1996). Urban citizenship is also useful for thinking of the different relationships between the uses that people make of cities and the an urban public realm (Beauregard and Bounds 2015). Mark Purcell (2003), similarly addresses the multi-scalar nature of citizenship, taking up Lefebvre's ideas to speak of citizens' right to participate in the construction and enjoyment of a global city, arguing for a *right to the global city* that accounts for the multiple belongings and needs of its inhabitants. These understandings allow us to look at urban citizenship not as a monolithic concept but as a fluid condition made of inclusions, exclusions and exceptions and which is contested and re-shaped by claims making, insurgency and contestation at multiple scales (Holston 2008).

#### *1.4.3. Urban Citizenship and the Politics of Infrastructure*

In this dissertation I conceive of infrastructural problems, paraphrasing McFarlane, "not just as the domain of government but as productive of government" (McFarlane 2008, 422). I use the concept of infrastructural citizenship to analyze those encounters between the government and citizens that are mediated by physical infrastructures. These encounters can take the form of the material and embodied experience of urban life that is mediated by infrastructural systems such as how access to water, roads and quality transportation and is generative of micropolitics, subjectivity and meaning (Simone 2004). A second kind of encounter relates to the formal governance of these infrastructures, how plans are designed, and who gets to participate and intervene in shaping their form and meaning. Infrastructural citizenship, thus is a concept that performs two important tasks for my analysis: it makes evident the regimes of belonging and exclusion that have been identified by scholars of citizenship and it exposes the governmental regimes that these infrastructures represent (Collier 2011) and the kinds of subjects they produce (Anand 2017). My analysis draws on two important bodies of work for a more complex understanding of the relationship between the built environment and regimes of citizenship. Namely, Marxist inspired scholarship on the production of urban space and its attention to the relationship between capitalism and urbanization, and Actor Network Theory and related frameworks that highlight the sociotechnical nature of infrastructure and bring forward a relational lens for the study of social and material transformations.

Marxist urban thought brought important critiques to ecological approaches to the urban life by focusing on the relationship between urbanization and capital accumulation. Manuel Castell's contribution to the field in *The Urban Question* (1977) and his work on urban social movements, *The City and the Grassroots* (1984) are exemplary of this. With the concept of collective consumption, Castells situates infrastructure as indispensable for social reproduction, and thus as critical for resolving the necessary tensions between classes in capitalist societies. Urban struggles, especially those coming from working class and the urban poor, are sites where important social transformations are generated. Urban social movements, through this lens, are manifestations of claims around the collective consumption of services, and are linked to the transformation of identities and the meaning of democracy. Castell's work echoes some of the propositions put forth by Henri Lefebvre in his writing on the right to the city in which he articulates the right to centrality, to communication and information (Lefebvre 1996). David Harvey's work also provide

important insights on how to think of infrastructure's role in capitalist economies. By thinking of circuits of investment, Harvey renders infrastructure as central to capital accumulation by allowing spatially-specific *fixes* to the inherent crises of capitalism. This approach has been shared by a long list of scholars that since the late 1970s explored urbanization in capitalist societies and analyzed the role of planning in directing infrastructural investments to sustain growth, especially in the industrialized North (Walker 1981; Dear and Scott 1981).

The current moment is one in marked by radical infrastructural innovation made possible by the proliferation of information technologies that allow targeted services and adaptive pricing, but service differentiation is not a recent phenomenon. We know that with the rise of the post-Fordism and neoliberal reforms many of the characteristics that had traditionally been assigned to infrastructural planning—though never completely true—are being abandoned or are rendered obsolete. Graham and Marvin (2001), have argued that the modernist ideal in planning aspired for the universal and uniform provision of infrastructure, but today's networked infrastructure allow for different configurations. With the retrenchment of the welfare state and the governance transformations that have taken place in cities across the globe, sectoral reforms are increasing the role of the private sector. Moreover, the commodification and liberalization of infrastructure provision renders urban infrastructural coverage a patchwork of premium users and bypassed populations. Scholars have well documented studied patterns of urbanization related to the economic globalization and the neoliberalization of urban governance shared by cities across the globe (Brenner and Theodore 2002; Guarneros-meza and Geddes 2010; Portes and Roberts 2005; Leitner, Peck, and Sheppard 2007). Especially relevant for the case discussed here are, without a doubt, studies on increased social inequality and urban fragmentation that a post-Fordist and global era has brought about (Sassen 2001; Davis 1992; Dear and Flusty 1998). Dear and Flusty (1998), for instance, highlight the patchwork nature of post-modern urbanization, describing an urban landscape characterized by discontinuity, privatization and surveillance.

Saskia Sassen (2001), in a parallel but also economic-centered analysis, has described the relationship between the global mobility of capital, the technological and human resource infrastructures that support it and the new hierarchies and centralities generated within cities across the globe. Graham and Marvin (2001), similarly, locate global economic processes as concurrent with the demise of modernist and comprehensive planning, where infrastructure helps sustain a process of “splintering urbanism”, and argue that “urban infrastructures are the driving connecting forces of the processes of globalization” (p. 8).

The polarizing and fragmenting patterns of post-modern urbanism also coincide with a period in which city governments have re-defined their role in what is known as the shift from managerialism to entrepreneurialism (Harvey 1989). In this shift, local governments increasingly prioritize their agendas in response to pressures to capture global financial capital, usually in the form of real-estate investment tied to the construction of profitable residential, commercial and corporate spaces (Harvey 1989). The re-hierarchization of urban centers that accompany the internationalization of capital flows (Scott 2001; Sassen 2001) also creates similar hierarchies within cities, in which investment is directed toward certain uses and areas, usually those that make “economic sense”, such as financial centers, consumption spaces, tourism destinations and historical architecture. Infrastructure provision and modernization, thus, are linked to efforts to attract increasingly mobile

capital and the production of turn-key premium lifestyle spaces for creative classes and other groups (Douglas 2012).

The increased differentiation in the provision of services has effects on patterns of inequality in the city. Technological innovations facilitate the privatization of public spaces and increased securitization (David 1992) in parallel to the increased criminalization of the poor and the stigmas of those that are denied access to basic infrastructure or are unable to use the newest and most modern amenities (Caldeira 2000; Davis 1992; Becker and Müller 2013). While this is not always the case, infrastructures also re-signify peripheral areas and bring services to neighborhoods that historically have been marginalized. An iconic case is the Metrocable gondola system and the electric staircases in Medellín (Brand and Dávila 2011). While these projects certainly bring about improvements in the quality of life of residents of some peripheral areas, these infrastructural upgrade projects and urban acupuncture interventions are also linked to branding and redevelopment of certain zones and particular political agendas and global boosterism (Sotomayor and Danieri 2017). These cases continue to raise critical questions regarding the effect of these infrastructures on larger processes of urbanization and whether and how such infrastructures serve the urban poor or further fragment cities along class division.

Graham and Marvin's, *Splintering Urbanism* is perhaps one of the most interesting recent examples of an attempt to construct a comprehensive framework for the study of the role that infrastructure plays in the production of space under the current political economy of global capitalism. Graham and Marvin's work provide two important insights used in this dissertation. First, they provide a "spatialized" understanding of how governance transformations and technological advances contribute to the formation of new forms of inequalities across different locales. In doing this, the authors move along a Marxist-inspired understanding of urbanization as a manifestation of capitalism. Second, by combining approaches from sociology (especially science and technology studies) with discussions from geography and planning, they make a convincing case for the need to develop analytical frameworks that focuses on networks and networked processes as fundamental elements of urban transformation across multiple scales. This work has been criticized for its overwhelming focus on the North and by taking a rather un-problematized conceptualization of modernist planning as universally applicable. However, ultimately, theirs is a welcomed proposition that also brings to the forefront the complexity of relationships across space and the constantly shifting centralities (or lack thereof) that make up the urban condition today (Brenner 2013; Dear and Flusty 1998; Roy 2009).

If Marxist inspired scholarship has shed light into infrastructure's role in mediating and "fixing" the crisis and contradictions of capitalism, recent work from geography, sociology, and anthropology offers an analytical framework that goes beyond the division between the technical and the social realm. Influenced by scholarship on Science and Technology Studies (STS) this research has brought important insights into the relationship between material infrastructures and the political (McFarlane and Rutherford 2008; Star 1999; Monstadt 2009; Latour and Porter 1996; Farias and Bender 2010; Swyngedouw 2005). This work breaks commonly understood divisions between passive natural and material objects and active humans. ANT considers that both human actors and non-human *actants* have the capacity to act on the existing world and produce social change. Under this lens, actants are studied as belonging to a network that afford them agency and as capable of

producing social (and political) transformations (Baiocchi, Graizbord, and Rodríguez-Muñiz 2013). Technological advances, in this view, are not detached from political projects but embedded and central to their life. Similarly, technological change, as for example the introduction of a new infrastructure such as the BRT, is the result of the assemblage of technical advances, political reforms and cultural changes. In this, no single actant has the capacity of transforming the world, and likewise, no transformation would be possible without the agency afforded to each of elements assembled in the network.

Another important contribution of this work is the recognition of the socio-technical nature of infrastructure, that is, how infrastructure mediates between the technical realm and the social realm. This is an especially important insight for a critical analysis of planning, as urban infrastructures, from water services, to electricity, to roads and communication systems, have the capacity to connect individuals but also, in their design, can bypass groups due to geographical location, economic resources or other criteria. Infrastructure is thus embedded in processes that produce inequality, as planners, managers and operators grant some users the right to enjoy a particular service, and exclude others (Graham and Marvin 200).

For planning, a discipline with one foot in the technical and one in the political, an ANT framework is an important contribution (Lieto and Beauregard 2015; Beauregard 2015). In the current moment when global problems such as climate change are taking front row in the agenda of planners and city officials, it brings a necessarily critical view of the field of international planning (Goldman 2006). Paying attention to infrastructural expertise, and in particular techno-scientific expertise, allows us to look at how ideas of progress and development are articulated through in the construction of infrastructure in cities and the explore the links between local governance reform and international development concerns and priorities

On a similar vein, ethnographic work has rendered infrastructure as contingent. In Abdumaliq Simone's words "the distinction between infrastructure and sociality is fluid and pragmatic rather than definitive. People work on things to work on each other, as these things work on them" (Simone 2012). With this, the relational aspect of infrastructure is further examined with two important consequences: first, that infrastructure is experienced on a personal level, expanding people's capacities and generating other infrastructures, which can be material and formal or not (Simone 2004); and secondly, it recognizes that infrastructures' relationship with the social is fluid and that these relationships (networks) can also have effects completely different from those originally intended. Recognizing infrastructure as non-stable brings attention to processes of learning that take place as individuals and objects come together. In other words, infrastructures do not work on people exclusively, this is a multi-directional relation that has unexpected consequences. Struggles for basic infrastructures, for example, can bring about larger processes of identity and mobilization, shaping identities and disrupting relations and social order as infrastructure mobilizes groups against external interests and the state (Appadurai 2002; McFarlane 2011).

### **1.5. The Politics of Immediacy as Guiding Metaphor**

In this dissertation I use the concept of immediacy as a guiding metaphor to analyze the practices and logics that accompany sustainable transportation projects and the effects that these have on the

citizenship landscape of the actually existing green city. Immediacy and its opposite—mediation—are concepts that have been well debated in the social sciences and humanities disciplines (Durham and Kellner 2009; Georgiou 2013; McQuire 2008; Berenschot 2010; Auyero 2011; McLuhan 1994)

In this analysis, I take up three related meanings of immediacy. The first, perhaps most common use of the term, has to do with distance and temporality. In this case immediacy means “the quality of bringing one into direct and instant involvement with something, giving rise to a sense of urgency or excitement” (Oxford English Dictionary 2017). Immediacy, thus, speaks to the important role that rapidness plays in the articulation of policymaking and the need to produce fast results. This resonates with the work on “fast” and “mobile” policy (Peck and Theodore 2010b; McCann and Ward 2011; Peck 2015). As scholars have argued these policies are mobilized as immediate and guaranteed solutions to simplified governance problems (Montero 2017b; Stern and Hall 2015; Wood 2014). By appealing to immediacy, policy makers justify the deployment of fast projects at the expense of more difficult reforms that could have deeper and longer-lasting effects.

Immediacy is also the quality of being immediate, that is “acting or being without the intervention of another object, cause, or agency” and “existing without intervening space or substance” (Webster English Dictionary, 2017). I evoke this meaning to call attention to how visual devices and technologies shape our experience of the world (McLuhan in Durham and Kellner, 2009) and how first person experiences can disrupt existing forms of meaning-making in the world (Ireland 2004). Immediacy helps me look at important strategies used by planners to resolve the challenges of dealing with technical complexity in efforts to legitimize reforms. Having been framed as urgent responses and given exceptional legal and institutional infrastructure, sustainable transportation projects often move quickly from plans elaborated by experts and to completed and fully operational infrastructures. But while the projects are justified in terms of their technical merits among experts and policymakers, when it comes to enrolling the general public, this technical complexity must be underplayed. Instead, projects, once built, must prove their effectiveness on their own and become matters of fact that stand not to technical scrutiny but ‘common sense’. In this kind of immediate planning, devices such as the charrette and other back casting techniques (Carlsson-Kanyama et al. 2008; Phdungsilp 2011; Condon 2012) commonly used in participatory planning exercises are not used to generate discussion and debate on how to move forward. In contrast, pilot projects are pre-designed and quickly implemented in order to be experienced by people first hand and free of mediation from representation devices, technical complexity and physical and cultural distance. In this case immediacy is present in the use of already completed projects to demonstrate, through experiential learning, a vision of the future not only to elites, policymakers and experts, but to wider publics, and especially to those not interested in technical debates around transportation policy.

Finally, with immediacy I engage with planning theory and the work of communicative planning theorists who define ideal planning processes as those where there is an effective mediation between actors with conflicting agendas (Forester 1999; Forester 1987). In this case, immediacy concerns the publics that assemble around projects and matters of concern (Barry 1999; Latour 2008; Leino and Laine 2012). With immediacy, I show that sustainable transportation projects, having materialized as pre-determined visions of what constitutes a green future, are used to call into being a particular form of public. But in this case this is a public called into being around ideas

of consumption, economic relevance and mass appeal and not the assembly of a public that engages in conversations around how to transform and improve the city. In other words, through the politics of immediacy, sustainable transportation best practices postpone public debates about a green urban future in which planners mediate competing visions of the future.

### **1.6. On Methods**

The data used in this dissertation was collected over 16 months between the summer of 2012 and December 2013. In this period, I conducted extensive in-depth interviews with over 60 city officials, transportation experts, NGO staff members, social movements activists and citizens. I visited most of them at their offices and had recorded conversation that ranged between 45 to 90 minutes. I also conducted participant observation of planning meetings, public forums, transportation industry and sustainable transportation conferences, as well as protests and other activist and social movement actions.

Being a Mexican graduate student at UC Berkeley played an important role in my field work. On the one hand, I am very familiar with the city, the assumptions that people make of certain neighborhoods and actors, and the many ways in which discourses about democracy, transparency and accountability are constructed by politicians, experts and lay people. However, I also had to learn a substantial amount of planning history of recent decades and understand the complex institutional and regulatory structure of the city. Identifying as a Berkeley planning student allowed me to get interviews with officials, presumably because they considered me to be not just a local but also somebody with ties to an important foreign institution. It became clear to me early on that academic capital was a valuable asset that actors and institutions seek and mobilize to legitimize their agendas. That I was associated with UC Berkeley also made me a “safe” or potentially and presumably allied researcher. Many of my interviewees assumed that I had studied under Professors Elizabeth Deakin and Robert Cervero, which are often cited by local experts and took for granted that I knew about and agreed with their ideas. These assumptions often made for quick rapport and a conversational tone in which my interviewees felt comfortable discussing their positions and biases, as they felt they did not have to convince me of the benefits of sustainable transportation and instead quickly dive into the more detailed inner workings of the projects.

### **1.7. Dissertation Road Map**

This dissertation is divided into 6 chapters through which I trace the development of política de movilidad into a concrete policy space. This introduction is followed by Chapter 2 lays out the context in which política de movilidad emerges. This chapter describes Mexico City’s patterns of spatial restructuring, the history of transportation policy, a brief analysis of the challenges of effective air quality policy and the history of democratization and the rise of the PRD regime.

Chapter 3 traces the process of inception and implementation of Metrobus, the BRT system. In this chapter I analyze the processes and actors behind Proyecto Metrobus, and argue that this project was made possible by the successful framing of the BRT as a technically sound solution and the political and financial autonomy granted by experts, international development institutions and progressive city officials. The chapter shows how PRD officials translated this transportation best practice into a left-pro-democratic project with a particular institutional configuration in which existing bus owners were incorporated into a new business model. In the aftermath of the project,

international development institutions, global philanthropy and international NGOs, transformed the landscape of activism and civil society engagement, introduced technocratic mechanisms for citizen participation and defined sustainable mobility along a narrow set of international best practices. I argue that these parameters shaped *política de movilidad* as a policy space, which I demonstrate in the Chapters 4 and 5.

Chapter 4 analyses the evolution of the bicycle planning agency, *Estrategia de Movilidad en Bicicleta* (EMB) and its flagship project, the bikeshare system, *Ecobici*. I argue that sustainable mobility became a flagship project for progressive PRD officials given its perceived capacity to bring local, national and international visibility to their work as innovative politicians. Moreover, the need to produce innovative projects in a short period of time consolidated the role of NGOs and experts that could produce such results as indispensable policymaking actors. In this chapter I also show how pilot projects are used to enroll publics into a technocratic vision of a sustainable city produced by planners and experts. To demonstrate that their vision is feasible, experts embarked in the project of re-signifying the bicycle, from a mode of transportation for the poor in the periphery, to an aspirational mode of transportation for middle class professional working and living in central districts. Lastly, the chapter argues that sustainable mobility projects, in their goal of producing a new public for green transportation systems, are reinforcing existing and generating patterns of infrastructure inequality and spatial difference.

In Chapter 5 I show how *política de movilidad* projects are at the center of struggles tied to the social and economic transformations of Mexico City's central districts. The chapter shows how *Ecoparq*, a street parking managing project defined as a mobility intervention was challenged by residents of a socially heterogeneous neighborhood. The conflict highlights how, despite the purported democratizing goals of *política de movilidad*, the technocratic logics that undergird this vision remain contested. The chapter shows how technological and institutional innovations are used to selectively disrupt superficial informal and illegal governance arrangements but do little to address deep seated practices of zoning infringement. The controversy around *Ecoparq* shows the limits of the current understanding of what citizen participation in the co-production of green urban landscapes is, is not and could be. In this case, the collaboration between a city agency and ITDP did not lead to a more inclusive process, instead, it helped polarized the neighborhoods and provided the city with legitimacy to attempt to impose their plan.

In Chapter 6 I present the conclusion of this dissertation. In this final chapter I reflect on how the logics, practices and governance mechanisms that made possible the projects previously analyzed are continuing to shape urban planning in Mexico City. I discuss the process that lead up to the transformation of SETRAVI (Road and Transportation Secretary) into SEMOVI (The Mobility Secretary). In this long process, city officials and NGOs worked together to institutionalize mechanism of consensus building, guidelines for public private partnerships and overall co-determine what constitutes adequate sustainable mobility. I also use this chapter to reflect on how the politics of immediacy shaped the possibility of good planning and how sustainable mobility projects became mechanism for technocratic policymaking that generate inequality and political displacement.



## **Chapter 2. The Multiple Dimensions of Política de Movilidad: Spatial restructuring, Transport Policy, Environmental Policy and the Rise of the Neoliberal Left in Mexico City.**

In this chapter I describe the spatial, economic and political dimensions that intersect in política de movilidad. First, I discuss how spatial and economic transformations of the last three decades in Mexico City have come to solidify historic patterns of spatial fragmentation. These spatial transformations, which coincide in time with the post-structural adjustment period, produced patterns of simultaneous decentralization of industrial activity and a concentration of tertiary economy activity in central districts. These shifts have increased prices of land and housing in and reinforced patterns of segregation in which poor workers travel long distances from remote residential locations to jobs centers in central locations. Secondly, I describe how decades-long underfunding of transportation and lax regulation have affected the capacity of the city to provide transportation services and complicated political relations between the city and bus owners. The chronic underperformance of transportation systems has fueled a demand for automobiles, which in turn has produced the high levels of congestion and pollution that Mexico City is infamous for. Thirdly, I discuss the general context in which air quality policy has functioned in Mexico. This is a process in which institutional fragmentation has limited the effects of efforts from the local and federal government and international institutions to curb pollution. The final section describes how internal demands for democratization and administrative decentralization and the rise to power of the left-party PRD has produced a particular regime. This regime is characterized by the contradictory enactment of pro-citizen participation reforms simultaneous to the implementation of pro-business neoliberal policies. Demands for citizen inclusion in planning, originated in urban social movements and other citizen organization were fundamental in the PRD's rise to power.

### **2.1. Economic transformations, spatial restructuring and the reinforcing of spatial inequality.**

Since the 1980s Mexico City has experienced an intense processes of spatial restructuring. These transformations coincided in time with the abandonment, at a national level, of an industry-led economic development model and the opening of the country's economy to foreign capital (Aguilar and Méndez 2006; Hiernaux Nicolas 1999). These processes, characteristic of IMF-prescribed structural adjustment reforms undertaken by many Latin American countries, began in the early 1980s following the debt crisis of 1982 (Portes and Roberts 2005). The rapid opening of Mexico's economy to foreign investment, the privatization of public companies and the decentralization of industrial activity to other regions had direct impacts in the economic makeup of the city. These processes have produced concrete physical transformations in the city that have negatively impacted the quality of life of the majority of the population and have generated new forms of spatial inequality (Portes and Roberts 2005). These processes must be located within a long-standing tendency for spatial fragmentation that historically has characterized Mexico City's urban development. In other words, the post-structural adjustment period came to solidify and exacerbate socio-spatial fragmentation.

Mexico City has been the country's largest population agglomeration and most important center of economic activity and administrative functions since colonial times (Ward 1998). This primacy survived the tumultuous decades after the independence and later, the revolution. Meanwhile, while other important provincial capitals and regions also experienced rapid rates of growth, such as

Monterrey and Guadalajara and the Bajío region, these never came close to surpassing Mexico City in size and economic importance. Throughout the remaining first half of the 20th century Mexico City continued its primacy, but in the years between the 1960s and the 1980s decades it experienced a notable increase in population growth becoming what the literature describes as a megacity (Pick and Butler 1997; Gilbert 1996). This growth was largely the result of national level policies that attempted to generate economic development through the adoption of import substitution and other similar rapid industrialization strategies. Along with this concentration of jobs and rapid expansion of the population came high levels of pressure to the local government's capacity to provide infrastructure, services and housing and other forms of planning (Pick and Butler 1997, Ward 1998). Mexico City's limited capacity for planning and service provision during these decades was similar to the situations present in several other capitals large cities of Latin America at the time (Gilbert 1996).

In the early 20<sup>th</sup> century Mexico City was a low-density city that had slowly expanded beyond the colonial city (Centro Histórico), swallowing other settlements and villages of the Mexico City Valley. This pattern of expansion followed clear logics of class differentiation. To the north and east, lower class neighborhoods that replaced what used to be indigenous settlements *extra-muros*. To the west and southwest, urban expansion was fueled by developers who catered to a nascent middle and professional class as well as a non-indigenous working class (Tenorio-Trillo 2013; Boils Morales 2005). The social composition of these areas evolved over time at the time that urbanization accelerated, absorbing indigenous settlements and towns that surrounded the city, such as Tacubaya, Coyoacán, Tacuba and others. These new developments, reinforced the distinct spatial differentiation pattern of a lower income east side and more mixed income west side, which included the most modern and wealthy neighborhoods of the moment such as Anzures, Polanco and Roma Norte along and near Avenida Reforma.

These patterns of relatively slow growth changed by the 1960s when the city began to receive large influx of population looking for jobs in new factories, construction sites and commercial zones. These high levels of urban immigration exceeded the capacity of the city to absorb new population. Moreover, the majority of these migrants came from the rural areas, took low-paying jobs and were not eligible for state-subsidized housing for formal workers. This pressure on supply was solved by informal settlement and auto-construction in a dynamic in which recently arrived workers were forced to procure housing in the informal market. The state contributed to this process by allowing the takeover of unoccupied land first, and years later, by negotiating with settlers the right to stay as well as the improvement of infrastructural conditions (Ward 2004). These dynamics were shaped by political negotiation between urban social movements and local authorities that have been analyzed extensively as important forms of citizenship making (Perló 1979; Perló and Schteingart 1984). In the case of Mexico City, the expansion of informal settlements meant that space was quickly exhausted and new immigrants had to move further and further away from the center of the city locating in remote areas where infrastructure and services, including transportation, were harder to supply.

Figure 2.1. Mexico City and surrounding metropolitan area



Along with the urban explosion on the peripheries, Mexico City also underwent important transformations that affected central areas and neighborhoods and changed the location patterns of working, middle and upper class households. Four developments that took place between the 1960s and 1980s are important to mention. First, the relocation of the National University from its original downtown location to a brand new campus located at the southern outskirts of the city (Schechinger and Jiménez 2008). This new campus was built on a lava fields known as Pedregal that were previously undeveloped but bordered the towns of Coyoacán, San Angel and Copilco. The campus could be accessed from central neighborhoods via Avenida Insurgentes. The extension of Insurgentes a modern and wide avenue also benefited a series of development projects in Pedregal and surrounding areas that catered to high-income homebuyers looking for housing that followed popular North American suburban, single family low-density architecture and urbanization styles. Insurgentes Avenue also became the most popular location for new offices space and entertainment businesses that were abandoning a rapidly deteriorating downtown. Over the years, Insurgentes became a *de facto* elongated CBD that houses not only commercial and office activities but also an important number of local and federal governmental offices along the stretch from the intersection of Insurgentes and Reforma to the intersection with Periferico Sur (Parnreiter 2002).

The second development was the construction of Ciudad Satelite, inaugurated on 1952 on the border between Mexico City and the municipality of Naucalpan, Estado de Mexico. Ciudad Satelite is a privately developed planned town that was connected to the city by the Periferico ring. Just as Pedregal, Satelite catered for those looking for an North American-style suburban lifestyle, however, satellite was not an exclusive neighborhood but an area affordable to middle classes

(Tarrés 1999). Ciudad satellite became an appealing destination to professionals that worked either in the central city or in the industrial areas in the north and northwest of the city (Tarrés 1999). Its closeness to Periferico also made it appealing to people commuting as far as the south end of the city. Despite its peripheral location, the area was very well served by business and a recently opened shopping center, Plaza Satellite, one the first US-style commercial developments in the country. Satellite made car-centered lifestyle popular and relatively accessible for the middle classes, who sought to relocate to low-density neighborhoods with modern homes in residential developments that while not necessarily exclusive, were perceived as safe and more desirable than old central neighborhoods (Alba et al. 2011). In short, Satellite came to embody, perhaps more than any other development of the time, the lifestyle of aspirational urban middle classes.

The third development was the implementation of the *sistema de ejes viales*, a road axis system. The system was promoted by the city chief (called Regente at that time) Carlos Hank in 1977 that had two objectives: to facilitate way finding in the rapidly growing city and to reduce congestion and speed up surface travel of vehicles. The system is a grid of medium and high capacity roads superimposed to the existing street layout of the city. Ejes viales run north-south and south-west and are numbered in ascending order from the center of the city. With this system one can find a destination by locating the closest intersection of this axes, for instance the corner of Eje 6 south and Eje 3 east and by moving north-south or east-west along one these streets. The system is made of surface roads that were made more efficient by widening them with the partial or complete demolition of blocks and the installation of road controls, overpasses and signaling for fast travel. This retrofitting increased the division and fragmentation of neighborhoods in the city, adding to the large division that the Metro's Line 2, that physically divides the city's east and west along Calzada de Tlalpan, had created. Ejes would come to reinforce these divisions at a smaller a smaller scale, with the fragmentation and separation of neighborhoods. Furthermore, the Ejes Viales symbolized an important commitment on the part of the city to automobile mobility with a policy that displaced and or eliminated a pedestrian city as residential blocks and business districts lost their walkability and became thoroughfares for cars.

Figure 2.2: Map of the Ejes Viales system



### *2.1.1. The 1985 Earthquake*

By the early 1980 the city was well settled on a path of atomization of middle classes, a re-concentration of the wealthy residences on western and southern semi-peripheral areas and the push toward car-centric development that brought about the abandonment of traditional public/pedestrian spaces. This processes would pick up speed and intensity in the following years thanks to most devastating disaster in the history of the city.

In the morning of September 19, 1985, the city experienced an earthquake that registered 8.4 in the Richter scale and created unprecedented devastation in the central areas of the city. The intensity and length of the earthquake was such that any city would have suffered, however, Mexico City's geological characteristics made it particularly vulnerable. Much of central Mexico City was built by the Spanish on top of a lake and the ground is notoriously soft. When the earthquake hit, these older and more central areas were disproportionately affected. Neighborhoods such as Roma, Juarez and the housing development Nonalco Tlatelolco suffered catastrophic levels of destruction. In these neighborhoods hundreds of buildings were structurally damaged, with a considerable number crumbling partially or completely. Being that Mexico's buildings are made of concrete and brick, many occupants were killed immediately after the buildings collapsed or on the following hours and days during which they remained trapped. The official figures at the time was of about five thousand fatal victims, but these numbers have been questioned by many, who argue that the real numbers exceeded thirty thousand (El Universal, 2011) .

The history of the citizen mobilization that took place in the aftermath as been well documented and is relevant to the analysis presented here, as it will be discussed in section 2 of this chapter. As far as the effects on housing and land markets, the earthquake added fuel to the exodus of middle classes and reinforced the steady disinvestment of downtown and surrounding neighborhoods. By 1990, the central districts of Mexico City had lost about 20% of their population, while the outer boroughs experienced the largest growth.

### *2.1.2. Global Mexico City*

The earthquake accelerated and reinforced peripheral growth and the re-concentration of economic activity outside of the historic core, but it was the processes of economic restructuring that created the conditions for these patterns to solidify. First, on the wake of the economic crisis sparked by oil and debt crises in 1982, Mexico City adopted a series of structural adjustment policies, following the prescriptions from international institutions (IMF-WB). These structural reforms included the abandonment of the developmentalist, industry-led economic model, the opening of the economy to private and international capital, the reduction of public spending and the privatization of several state companies (Lustig 1990). The country also faced internal and international pressures to accompany these economic reforms with efforts aimed at state decentralization and democratization (Davis and Brachet-Márquez 1997; Cornelius, Craig, and Fox 1994; Isunza Vera and de la Jara 2006). For Mexico City, this meant the restructuring of its economic base and the reduction of its capacity to meet demand for urban services. The federal government instituted policies promote other forms of economic growth, particularly, the maquiladora, labor intensive manufacturing for export model along the northern border with the US to take advantage of special tax zone and the closeness to the US market. Several other industries faced shrinkage as import tariffs were reduced

and the consumer had access to lower-cost consumer goods manufactured elsewhere. With this, an important percentage of Mexico City's manufacturing base was lost. Adding to an overall de-industrialization of the economy, there was also another effort to de-concentrate some of the remaining industrial activity and to develop other areas of the country as well as to reduce environmental pollution in Mexico City. This meant the relocation of industries to surrounding states (Legorreta and Flores 1989; Williams 2001).

The re-focusing of the economy also had a spatial manifestation in the city. The growing tertiary economy and service sector activity was concentrated along the city's most important avenues, Insurgentes and Reforma. In the case of Insurgentes, this avenue was already becoming a *de facto* linear CBD with the relocation of financial and government offices in previous decades and the 1990s brought the consolidation of this process with projects such as the World Trade Center. Avenida Reforma has historically been considered to be the most beautiful streets in the country but had mostly been known for its monuments, hotels and historic buildings more than anything else. In the 1990s, however Reforma and the neighborhoods that flank it, such as Polanco and Lomas, became a preferred location for many of the new financial and producer services activities (Parnreiter 2002; Hiernaux Nicolas 1999). This was reinforced by the development of the Santa Fe district that also included the expansion of Avenida Reforma that now extend onto the southwest periphery of the city to reach the new development of Santa Fe, which would become the epitome of global Mexico City. Santa Fe, in fact, requires special mention given the particular mechanisms through which it was developed, the idea of privatized urbanism that it responded to, and the particular challenges that it created for the functioning of the rest of the city (Moreno Carranco 2008; Negrete 2010).

By the early 2000s the economic restructuring of the city had produced a pattern of concentration of economic activity along the Reforma-Santa Fe and Insurgentes corridors. These transformations were also accompanied with different forms of spatial and social fragmentation. On the one hand, the country's macroeconomic policy generated a shortage of formal wage jobs, especially mid and low paying professions and since that period working class population has increasingly relied on informal employment (Portes and Roberts 2005). Much of this employment takes the form of itinerant street-vending of food and small goods, housekeeping services, daily labor in construction and maintenance. In fact, informal street commerce had become more common in all but the most exclusive neighborhoods (Crossa 2009; Cross and Camacho 1996; Vega 2012). Conversely, economic hardship has also made it more difficult for low-income residents to secure food and housing, which results in overcrowding of the affordable units near central work areas, or the relocation to the new peripheries of the metropolis in distant municipalities in Estado de Mexico from which hundreds of thousands commute to informal jobs everyday (Guerra 2013). The economic crisis has also been associated to the spike of criminal activity, much of it in the form of petty crime, street theft and home invasions, which has also fueled discourses of crime and the fortification of homes, policing of public spaces, and similar strategies to control public and private spaces and keep certain populations separated (Davis and Reyes 2007; Crossa 2009; Becker and Müller 2013).

Urban development has also responded to transformations in the national economy and has followed strategies to attract capital investment. Following common policies of entrepreneurial

urbanism (Harvey 1989; Hiernaux Nicolas 1999), the city has embarked in capital seeking projects that include high-end commercial and residential real-state development. This high scale, large-project approach, epitomized by Santa Fe and Nuevo Polanco has been accompanied by other forms entrepreneurial development such as heritage tourism and commercial revitalization. These strategies have been more salient in central central areas that had been abandoned since the 1970s, such as the western section of Centro Historico and Alameda Central, which since the 2000s have been the target of private investment (Monterrubio 2011; Davis and Reyes 2007; Hiernaux Nicolas 1999). The most important of these initiatives has been undertaken by a recently created development agency, Autoridad del Centro Historico in collaboration with Fundación Carlos Slim, which is behind the radical transformation of a large section of Centro Historico into tourism and consumption spaces. Along with this focalized revitalization project, other nearby areas rich in historic architecture and close to amenities such as museums and restaurants have also experienced an economic boom. Notable among these are the neighborhoods of Roma and Condesa, which are the sites of two projects that are analyzed in this dissertation. As a consequence, old housing stock is becoming scarce as investors move in to capitalize in the new market (Díaz Parra 2016). These processes of investment and re-development of central districts have been possible by two strategies. One is the use of securitization and other punitive urbanism tactics (Müller 2016), which is often done through the use of more police forces patrolling the street but also by the use of surveillance technologies (Davis and Reyes 2007; Müller 2016) and the reconfiguration of public spaces. Another common “cleaning” strategy is the upgrading of plazas, sidewalks and other public spaces under the excuse of improvement. This is a process that requires the forceful removal of informal vendors, who are not allowed to return once the works are finalized. A second one, and which is the focus of this dissertation, is the promotion of livability improvements and greening interventions, of which sustainable transportation and pedestrian upgrading are the most common.

Figure 2.3. Intersection of Reforma and Insurgentes Avenue (Source: Reforma 180)



These process of re-valorization should be put into perspective of larger uneven development spatial shifts. Authors have identified the combination of economic reform and new strategies of development as factors that have led to furthering spatial inequalities, segregation and the loss of public spaces (Moreno Carranco 2008; Saraví 2008; Bayón and Saraví 2013). These transformations are also reflected on consumption and recreational patterns of residents, who tend to spend more time in semi-private spaces, such as shopping malls, cinemas and the like (Canclini 2008; Saraví 2008). This shift toward the use of semi-private spaces is also complemented with the city's increased use of public spaces and landmarks into strategic public-private projects that combine marketing with recreation. For example, the Zocalo (main plaza) is used by the city and private companies as a space for special events, fairs, concerts which often profile corporate sponsors such as Coca Cola (Regeneración 2016). Other spaces, such as parks and plazas and underpasses are being upgraded through sponsorship and the creation of advertising and commercial spaces, in projects that are coordinated by new city agencies created *ex profeso* such as Autoridad del Espacio Publico which will be discussed at greater detail on this dissertation's chapter 5.

Experts agree that Mexico City is experiencing an real-state boom which is fueled by the financialization of real-state development and the expansion of credit availability, which have worked in tandem with the enactment of several measures aimed at the re-densification (Celis, n.d.) and revitalization of central areas. These processes have generated large increases in the price of land and housing in central areas (up to 150% increase in 10 years), which in turns has pushed new development into peripheral low-income areas, especially those relatively close to Santa Fe or Insurgentes (Riquelme 2017). Today semi-peripheral areas, such as Cuajimalpa, Magdalena Contreras, Mixcoac, are sites of investment in apartment buildings or low elevation, horizontal condominiums that cater to customers with a higher economic level than those of long-time residents of these communities. These process of revaluation of inner ring periphery along with a privatized national housing policy that for the last decades has taken a suburbanization approach has expelled low-income population to remote locations in Mexico City's hinterland. Today low-income households, whether housed in informal developments or formal developments, often live many kilometers away from work centers in communities that have very poor connectivity and lack many services. Furthermore, low income residents must travel for several hours a day to commute to and from work using low-quality transportation or private vehicles.

### *2.1.3. Central Renaissance and Spatial Differentiation: Polanco, Roma and Condesa,*

Metrobus, the BRT discussed in Chapter 3, traverses Avenida Insurgentes, which is the city's linear CBD and that along with Avenida Reforma, house most of Mexico's global economy activities. In turn, these avenues have revaluated surrounding neighborhoods located close to them and to Centro Historico. Three of these neighborhoods are especially relevant to this dissertation as they are the location of the cases analyzed in chapters 4 and 5: Polanco, Condesa and Roma. As the following chapters will show, the effects of revitalization of central areas is not homogenous and the pre-existing conditions of different neighborhoods should be taken into consideration. In fact, its this differences what make possible the processes of uneven development (Smith 2002) that sustain the spatial, economic and social restructuring of 21st Century Mexico City. In the following paragraphs I provide a brief description of these neighborhoods.



### Polanco

Polanco is an iconic upper class district north of Avenida Reforma. Historically, this was an area where wealthy families located in the 1940s when older areas closer to Centro Historico ceased to be fashionable. Polanco was built close to Bosque de Chapultepec, on the other side of Avenida Reforma and offered the possibility of constructing new and more fashionable residences. Polanco was eventually populated with luxury apartment buildings, restaurants and boutiques. Its main avenue, Presidente Mazaryk, eventually became the most iconic high-end commercial strips in the city and today houses boutiques and restaurants on par with the most famous luxury tourist destinations in the globe. The neighborhood's amenities also include a good amount of parks, plazas and open space. In the last three decades the area has experienced a significant spike of office and commercial activity, at the same time that residential buildings became more expensive as land prices incremented. Polanco today, is solidly established as one of main economic hubs of the city and it has always enjoyed a privileged location and some of the city's best infrastructure and connectivity. However, it was never physically planned to become an commercial zone and today it suffers from extreme congestion.

Figure 2.4. Roma, Condesa and Polanco in relationship to Downtown and the rest of the City



Figure 2.5. Avenida Mazaryk in Polanco



### *Roma and Condesa*

Roma and Condesa (and specially Roma) neighborhoods, in contrast with Polanco, are more socially heterogeneous neighborhoods that have experienced notable shifts in their social composition. Roma and Condesa are a couple of decades older than Polanco and are neighborhoods that were first developed in the early 1900s as Mexico's working class and bourgeoisie expanded out of downtown (Tenorio-Trillo 2013; 1996). These neighborhoods, as it was fashionable at the time, were designed with a strong influence of French architecture and street design and they continue to be known for their tree-lined streets, elaborate facades and multiple parks and public spaces. Condesa was developed on what once was a horse racing track and its layout still shows the track's oval shape. Condesa, along with some of the northernmost sections of Colonia Roma were the populated by wealthy families that built large homes and mansions and large apartment buildings that were marketed to upper middle class families. Roma, which was closer to Centro Historico, had a more mixed composition and the farther east and south sections of the neighborhood were populated by lower income families that lived in small "tenements", *vecindades*, or in what remained of the old ex-urban settlements of the prior century (Rosete 2004).

Roma and Condesa experienced a notable boom and quickly expanded in their first decades of existence but eventually lost some of their appeal to newer residential areas such as nearby Polanco, and later in the 1960s, to brand new suburban style developments in the South end of the city by the recently opened UNAM in campus Pedregal or in the newly constructed Ciudad Satelite. In the 1970s the east-most section of the Roma, which was largely undeveloped became the site of an iconic public housing complex, Multi-Familiar Juarez, designed by Mario Pani, who also designed the Nonalco Tlatelolco complex. This came to strengthen the social heterogeneity of Roma as a site where modern state housing, long established low-income household and the remains of an aristocratic past coexisted.

By the 1980s Roma's old housing stock was experience decay, especially poor tenement buildings and *vecindades* that had always housed lower income households. As most of the central areas of the city, which lay on top of the old lake on which the colonial city was built, Roma and Condesa were heavily devastated by the September 1985 earthquake. The damage in the area included complete crumbling down of buildings and homes and the partial destruction of Presidente Juarez public housing development, which was later demolished (Mecatl, Michel, and Ziccardi 1987).

Figure 2.6. Colonia Roma Architecture



In the days immediately following this disaster, Roma became a key site for citizen mobilization as residents organized to deal with the rescue of victims and the immediate humanitarian crisis of the moment (Cuevas 1987; Monsiváis 1987). In the following months and years Roma was also a site of intense mobilization around housing and the *right to stay*. Several of the most affected buildings were low-income multifamily units which the government planned to demolish, relocating their residents to less central areas of the city. These groups of “damnificados” (disaster victims) organized and formed a Coordinadora de Damnificados, to avoid displacement with a varied degree of success (Rabell and Mier y Terán 1986; Mecatl, Michel, and Ziccardi 1987). Some groups were able to repair and reconstruct their units (with government and global civil society money), others were not able to repair their buildings, but negotiated and were allowed to stay despite the inherent risk of inhabiting compromised structures. In a few cases this legal process continues to this day and several of these buildings remain squatted by long-time residents with no clear legal ownership

and defying safety guidelines that deem the buildings unsafe to inhabit. Around the neighborhood it is easy to see other legacies of the earthquake, in the form of partially sunk and or retrofitted buildings but also of several buildings with plaques that show that they were reconstructed by the *daminificados*, a community center, memorials, etc. In short, the legacy of the earthquake and the social mobilization that it generated remains visible and present among neighbors, especially those that have resided in the area for decades.

In the years following the earthquake Roma and Condesa also experienced an important decrease of population as families that had the possibility to relocate to other areas of the city that were perceived as safer, more modern or better located did so. This trend extended well into the 1990s however, by the 2000s, the area begins to experience a renaissance with the resurrection of Condesa as bohemian and artistic neighborhood. In a matter of years Condesa, and later Roma, saw a large transformation of its main avenues into important centers of leisure and art. Cafés, restaurants, bars and boutiques turned this neighborhood into desirable area for creative classes actors and artists, writers, graphic designers, filmmakers, etc (Hurtado Cano 2010; Olivera and Delgadillo 2014). Along with this the area also experienced a real state boom, with luxury buildings replacing old and dilapidated homes and buildings that had never recovered from the earthquake's aftermath. Condesa and Roma are now two of the most desirable neighborhoods in the city, they attract visitors and tourists, and their cultural and entertainment offerings continue to grow.

Figure 2.7. Nightlife in Condesa



This renaissance process has also led to different forms of displacement. Today, these neighborhoods show a clear divide between residents that have been in the area for decades and those that are recent arrivals. This situation is more striking in Roma, which historically had more low-income residences (Hurtado Cano 2010; Olivera and Delgadillo 2014). The divide is not only along age and lifestyles, most importantly, is along income lines: the low-income population usually occupies old building stock that contrasts sharply with the new construction that for the last 10 years has accompanied an influx of higher income residents. The older *vecindades* and apartment buildings have limited or no parking spaces, whereas the new buildings are sold with one or two parking spaces as one of their most attractive features. This is a contrast with Polanco for instance, where most residential buildings have parking because they were always meant for high income residents.

## **2.2. Locating the Political Role of Transportation and Mobility Policy**

Transportation reforms in Latin America have been the focus of growing attention in recent years. Much of this interest has been sparked by the rapid ascent of Bus Rapid Transit, a technology developed in Curitiba, Bogotá and Quito as a global best practice (Montero 2017a; Wood 2014). The majority of these analyses have been framed in terms of understanding the dynamics that allow for the circulation of these best practices (Montero 2017; Wood 2014) or the political constraints to the implementation of BRT projects and the governance arrangements that these projects come to transform (Flores Dewey 2013). With a few exceptions, these works do not take a critical stance on the effects that these reforms might have beyond the implementation of the projects. This might not be as surprising if we take into consideration that much of the scholarship has come from the transportation planning and transportation geography fields and is often funded by organizations invested in the promotion of BRT (foundations, development agencies, etc). While these works offer important insights into how transportation reforms can be successful, they tell us very little about the political implications of these reforms. In this section, I intend to contextualize transportation reform in Mexico by on the interrelated issues a) on the history of transportation the provision of services, namely, bus service, as a sectoral reform made of particular dynamics and and by arguing that its analysis requires a larger understanding of neoliberal reforms, re-regulation and transnational governance.

There has been an important shift from focusing on the financing of infrastructure per se to a more broad push to transform the governance of services (Herrera and Post 2014; Dubash and Morgan 2013). Institutions such as the World Bank or the Inter American Development Bank have been promoting market and privatizing reforms across the Global South for decades. As part of previous structural adjustment reforms, privatization and de-regulation of public companies and service provision are considered to be part of neoliberal governance (Post 2008). Transportation services and infrastructure reform in Mexico City, however, diverge from this narrative. Whereas the models that are being promoted are based on private sector participation, financial autonomy and efficiency, they are also, in fact, reforms that have the goal of introducing re-regulation to a semi-informal industry and are aimed at creating the conditions for centralized governmental oversight of bus services. In the case of other infrastructures, such as parking meters and the bikeshare system, the city is also positioning itself as able to regulate new services. In short, transportation reform in Mexico constitutes an interesting variation on well known processes of sectoral reform.

### *2.2.1. Transportation Governance in Mexico City - Historical Perspective*

In order to understand the significance of the current push for re-regulation it is necessary to have a historical perspective of Mexico City's transportation governance and the different configurations in which the city has responded to user demands as well as demands from other interest groups. As it was the case in many other cities transportation services had been provided by public state-owned companies as well as private actors. Beginning in this early period, the city has undergone multiple periods of privatization, public oversight, fragmentation and centralization of services which have responded, in turn, to different challenges such as rapid urban expansion, or more recently, sustainable development. The account presented in this section is mostly focused on public transit provision, but it should be noted that these efforts should be placed within a larger context of a simultaneous expansion of road infrastructure that also been used, oftentimes in conflict, with private automobiles.

#### *Early XX century: Trolleys and Camiones*

Electric trolleys arrived in Mexico City as part of the modernization process that Mexico experienced during Porfirio Diaz's long presidency (1884-1911). This technology was an upgrade to the existing non-electric (animal propelled) trolley system that since the end of the XIX century provided service throughout a constantly expanding area made up by different towns in the Mexico Valley (Camarena 1991). By 1910 the electric trolley shared roads with vehicles of animal propulsion as well as a small number of internal combustion automobiles. By 1917 electrical trolley services extended along 14 lines and 343 kilometers (Rodríguez and Navarro 1999). This system was considered to be efficient and effective at taking advantage of the general improvement of the city's roads, both in terms of the use of asphalt as well as the re-organization of roads (overall, modernization). The electrical trolley system was run by a foreign company that operated the system as a monopoly. The company had a contentious relationship with its employees and in 1917 conflict resulted on a worker's strike during which the government sided with the company. In response to the lack of trolley operators, it was the users who took on such responsibility and became operators themselves. Overtime this conflict led to the appearance of a new group of actors that took advantage of the situation and created an alternative system. This system was made of cargo trucks (camiones) that were adapted to seat passengers. This alternative system also took advantage of the fact that the city made it easy to obtain permits and licenses and quickly became a system that broke the monopoly of the trolley (Rodríguez and Navarro 1996). The trolley conflict continued until 1946 when the government nationalized and took over the company, at a moment when camiones already dominated public transport service in the city<sup>1</sup>.

The bus system that came to substitute the trolleys has several advantages that facilitated its rapid expansion. The two most important ones being the flexibility and low-entry cost for entrepreneurs as compared to the trolley, which required a substantial investment in track and electrical wiring. Thus, bus services allowed for a business model that came to be known as "hombre camión", that is, a model in which one individual is simultaneously the owner and operator of a vehicle. Over time, some of these hombre camión became small entrepreneurs who owned several vehicles and had the power to make decisions on which routes to cover. In this early period, which extends until the

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<sup>1</sup> This is the reason why in Mexico buses are called camiones (trucks). Relatedly, camiones continue to be adapted cargo trucks with standard transmission and high rise floors, which increase the difficulty to board/ exit and the diminishes comfort.

1930s bus owners (*transportistas*) are entrepreneurs that benefit from government subsidies in the form of fuel, assistance to purchase vehicles and the use of expanding road infrastructure. Over time, *transportistas* and their multiple routes became the most important system in the city, while trolleys (which disappeared in 1979) and trolleybuses, which were both publicly owned, lost relevance. This condition is known by the name of “pulpo camionero” (the bus octopus) (J. R. López and B 1999) not just because of the large number of routes and trips they controlled, but also the reach of the bus owners’ political influence, which allowed them to intervene in local and national politics as they were involved in policy decisions related to routes and monopolies, but also in other aspects of the country’s political life (Perló, in Rodríguez and Navarro 1999; Romero 1987).

### *The Metro and Ruta 100*

In the mid 1960s a local engineering firm, ICA, began promoting the idea of constructing metro system in the city. ICA saw in the system a solution to a growing passenger demand but also the possibility to coordinate transportation services which were already fragmented and as a mechanism to re-order the land use in several areas of the city (Davis 1994; Romero 1987). The metro project was not without controversy, and among those against it was the City Chief (Regente) Ernesto Uruchurtu, for whom the project, on top of having a high economic cost, also represented a drastic change in the city’s power dynamics and relations with sectors such as the bus owners union (Davis 1994). Despite this important opposition, the system was implemented and built with technical and financial support from France and its first two lines were completed by 1969. The metro was to be, at least on paper, the spine of the city’s transportation system. However, while the system was supposed to order transportation in the city, it did not replace the existing services. For instance, as metro was expanded, also did the bus demand rouse, which ultimately made bus operation more profitable. Thus, the metro, rather than ordering bus services and reducing their importance, it ultimately benefited bus owners and fueled their growth. This does not mean that the metro was not necessary, as the user demand continues to show that a rail transit system was needed. The metro system grew in uneven spurts over the following decades and today it covers over 200 kilometers with its 12 lines. As with other public transit services, the cost of the trip has been heavily subsidized for passengers.

### *Conflict with Transportistas*

Toward the end of the 1970s the relationships between city government and the bus owners was extremely deteriorated. The government tried to take control of urban growth processes, specially in the periphery and also tried to keep bus fares low in an effort to maintain popular support. On the other side, *transportistas* saw their profits shrink due to traffic congestion, demand saturation and an increase in the number of “tolerados”, or semi-informal permits, for jitney taxis (microbuses) to operate (Rodríguez and Navarro 1999; Saldívar 1997). In light of increasing tension between the city and camioneros and the diminishing profit margin of buses against semi-informal taxis and jitneys, the city decided to remove permits for buses and created a publicly owned system. At the same time, the city did not remove semi-informal permits for jitney taxis. The new publicly-owned system, called Ruta 100, was inaugurated in 1981.

Figure 2.8. Ruta 100 articulated bus that covered the northern section of Metrobus L1 route prior to deregulation (Source: Flickr)



Ruta 100 brought several innovations in bus services that increased its efficiency and, for a short period of time, it was successful at centralizing an important part of service provision. Ruta 100 was well received by its users and was considered to be the most important system for several years. However, conflict with its worker's union and the governments shrinking public spending capacity in this post-structural adjustment period led to its demise and in 1995 the company was dismantled and services were, once again, fragmented. This process also meant a gradual increase of importance of the semi-informal jitneys, which quickly multiplied in numbers. According to Rodriguez and Navarro (1999) at that moment of its demise Ruta 100 only captured 6.7% of the city trips, while in 1973 camioneros captured 43% of trips. At the same time, the semi-informal taxis and jitneys captured 55% of the trips, which shows the importance of a system that is much more difficult to regulate and operates with low standards of safety and quality. Thus, while Ruta 100 meant to centralize and regulate bus services and reduce the power of the pulpo caminero, in practice, it was proven ineffective given the city's leniency toward semi-informal providers that ultimately resulted in more fragmentation.



Figure 2.9. Microbus jitney, Mexico City's one of most used form of public transportation (Source: En Movimiento Revista)



### *Transportation in the XXI Century*

The last decade of the XX century was marked by the dismantling of Ruta 100 and the expansion of collective taxis and jitneys, which in turn is the result of the limited control that the government has over the growth of semi-unregulated services. By the early years of the XXI century the offer of transportation services in the city included: the Metro, the trolleybus and light rail train networks (publicly owned), a small number of companies that operate bus routes as consolidated corridors and multiple routes of collective taxis and jitneys, as well as private taxis. In recent years two new services arrived, the Metrobus BRT, inaugurated in 2006, which replaced collective taxis in Insurgentes, and the suburban train, that arrived in 2008. Both systems are centralized, the BRT as a decentralized organism and the second as a concession to the Spanish firm CAF. The suburban train is a Federal project, but the BRT is a project of the local government that has the goal of reducing pollution, traffic congestion and re-order and centralized transportation services in different areas (Salazar and Lezama 2008).

### *2.2.2. An Integrated System Approach and Política de Movilidad*

This brief account illustrates several important dynamics characteristic of Mexico City's transportation governance. First, and perhaps the most salient, has been the changing position of the city government, which has in several occasions shifted from an approach that relies on allowing

semi-unregulated bus owners to provide services and others in which it has sought to take complete control over transportation service provision. This back and forth has taken place under a particular understanding of transportation in which the governments consider that these systems serve a *public function* and thus, the fare prices should remain accessible to low income residents. In practice, this means that transportation policy decisions usually respond to political motivations that have unevenly affect poor residents, which are the vast majority of users (CDHDF 2013). Notwithstanding this, the city offers more transportation options and at a lower cost than any other city in the country.

Throughout the XX and XXI century Mexico City administration have faced important challenges and have constantly faced conflict with private bus operators that seek more revenue and have been successful in their pressuring. When the city has attempted to expand its service provision capacity with public enterprises, such as with Ruta 100, economic constraints have also put limits to such efforts. The result has been that today transportation service is highly fragmented. Centralized and publicly owned systems offer better quality services but at high expense for the city while private services are not coordinated and offer substantially lower quality service. This situation highlights the need for a long-overdue integrated transportation system, which is something all experts agree on. Legorreta and Flores (1989) for instance, show that as early as 1983 the metropolitan development plans for Mexico City have included an integrated system, however, no policies that could lead to such system have been implemented. At a more recent moment, Plan Verde, launched by mayor Marcelo Ebrard (2006-2012) has also called for such policies and in fact, several of the actions undertaken with this goal are analyzed in this dissertation as *política de movilidad* projects.

### 2.2.3. *The Sustainable Mobility Paradigm.*

The projects that are the focus of this dissertation respond not only to local needs but also in great part to the rise of sustainable mobility as a paradigm within transportation planning circles. In the following section I sketch important elements of this paradigm and discuss its implications for transportation policy governance in Mexico and cities across the globe.

Sustainable mobility has raised in recent years as a paradigm that calls for a re-understanding of what is the role that transportation plays in the functioning of cities and the livelihoods of its inhabitants (Banister 2008; Low 2012). Traditionally, transportation planning had been focused on efficiency over any other concern (Banister 2008). In contrast, the sustainable mobility paradigm is concerned not only with travel time efficiency but also with bringing the qualitative dimensions of transport systems to the forefront. For instance, sustainable mobility is concerned with *how* transportation time is used, what is the qualitative dimension of the trip, *what* are the consequences of transport for the environment, and *who* gets to participate in and benefit from transportation planning decisions (Lucas et al. 2008; Sagaris 2010). Adopting the sustainable mobility paradigm, thus, implies envisioning transportation systems as indispensable for the construction of sustainable, livable and inclusive cities.

Political mobilization and the claims for access to planning processes and transportation justice (Burgos and Pulido 1998) have also come to play an important role in defining mobility. In fact, while transportation traditionally responded to the needs of city governments and private interests who seek to influence land use and public investment, today citizens that make claims around the

right to access to infrastructure (Burgos and Pulido 1998; Sagaris 2010; Silva 2012; Velázquez García 2008; Henderson 2013; Issel 1999) or against projects (Sosa López 2017) are increasingly being taken into consideration.

In Latin American cities, sustainable mobility has been given meanings that further complicate the political dimensions of transportation and Latin American city governments are reforming transportation agencies and with that are articulating a set of claims about what these infrastructures can do. In Mexico, for example, city officials and transportation experts are borrowing from other city experiences, such as that of Bogotá under mayor Enrique Peñalosa, to argue that investment in better mass transit systems, bicycle infrastructure or pedestrian improvements can reverse long-seated inequalities and generate the conditions for safer, inclusive and economically thriving cities. In these cases, increases on public spending directed to mass transit and governance transformations that allow private actors to expand services are defined as proof that investment in mobility is, in fact, generating more equal societies (Gaceta Oficial Distrito Oficial 2014). International NGOs, experts, and other non-state actors are also promoting particular mechanisms through which sustainable mobility planning must be done (CTS Embarq Mexico 2013; Medina et al. 2012). These actors, incorporating current best practices in the field of planning, argue that mobility planning should be done in collaboration with citizens (CTS Embarq Mexico 2013; Medina et al. 2012; Centro de Colaboración Cívica 2012). The adoption of sustainable mobility paradigm has, indeed, been accompanied by a pluralization of policy actors. Today, transportation experts, development institutions, global philanthropy and local and international NGOs are increasingly important actors in transport policymaking processes. These actors usually use global best practices to promote their agendas (Montero 2017c; Sosa Lopez and Montero, n.d.). This reflects the ways in which international development institutions have become key nodes in the production of authoritative green knowledge (Goldman 2006) but also the complex relationship of collaboration and contestation that these institutions have with other transnational activists and NGOs (Tarrow 2005; Hochstetler and Keck 2007).

### **2.3. Air Pollution to Climate Change: Air quality and the Challenges to Environmental Governance**

Mexico City's governmental and institutional structures pose important challenges for the execution of effective environmental policy (Molina and Molina 2004; Arroyo Alejandro and Rodríguez Alvarez 2014; Romero Lankao 2007). This situation has worsened, as some authors have argued, with a series of reforms enacted since the 1990s with the intention of decentralizing the state (Williams 2001). This does not mean that Mexican authorities and experts have not attempted to overcome these challenges or, at least on paper, have made concise and practical proposals to address the Mexico City's most pressing environmental challenges. Since the 1990s there has been a series of plans, strategies and institutional reforms aimed and curbing air pollution in Mexico City Metropolitan Area through legislation, monitoring and technological modernization. At first these efforts were done in collaboration between scientists, local civil society (environmental movement) and government officials (Legorreta and Flores 1989). In more recent years, with the rise of concerns with climate change and green house gasses emissions, there has also been and increased participation of international institutions such as the World Bank, global philanthropy and a series of NGOs, expert networks and think tanks with local and global reach. While the recommendations made by these actors and the plans prepared by the local government are broad in

scope, emissions monitoring and transport sector reform are the two areas that have received most of the attention and in which more progress has been made. In this section I will discuss how clean air plans (PICCA and Mario Molina's plan PROAIRE II and III) evolved thanks to the collaboration between the city and World Bank and other institutions, such as the Massachusetts Institute of Technology. This collaboration culminates with the Metrobus Project, which stems from a World Bank sponsored project aimed at climate change mitigation in which this institution partnered with the city and a Shell Foundation-funded newly created sustainable transportation NGO, Centro de Transporte Sustentable (CTS).

Mexico City's first comprehensive plan to improve air quality dates from 1990. The program was called Plan Integral Calidad de Aire (PICCA) and it proposed actions for the period that spanned from 1990 to 1994. This plan was framed in terms of air quality improvement and focused on the reduction of Ozone, Suspended Particles and Lead. The plan, like other most urban policies at the moment was determined at the federal level, since at that time Mexico City was run not by an autonomous government a special department of the federal government. The centralized nature of the plan had some advantage and allowed for important advances. For example, the plan was linked to measures that went beyond the reach of local governance, most notably, the improvement of gas and diesel formulas. Similarly, the national oil company PEMEX shut down the Refinery 18 de Marzo and the government initiated a program to de-concentrate industrial activity to other regions of the country. The adoption of these proposed measures had significant effects. First, they reduced the emission of pollutants from fixed sources (factories), while improvement of gas formulas also reduced the amount of toxic emissions from vehicles, especially lead, which was removed from all fuels. Second, at the local level the city instituted permanently the *Hoy No Circula* policy and made emissions testing a requirement for all local vehicles. While these policies tried to curve emission per vehicle (by improving combustion and reducing use once a week) these policies did not aim and were not capable of reducing the size of the city's bus fleet nor that of private vehicles (Molina and Molina 2012).

### 2.3.1. PROAIRE I

In 1995 the city implemented a new plan, called PROAIRE I (1995-2000). PROAIRE I continued with several of the strategies established in PICCA, but also introduced new elements. PROAIRE I, for instance, called for a more comprehensive coordination between multiple local governments and agencies in the metropolitan area and at the federal level. The plan stressed the need to develop metrics for the quantification of sources of pollutants and a more scientific measuring of these in line with scientific advances of the time (Lezama and Graizbord 2010). The plan was supported by loan from the World Bank that was used to finance the upgrading of buses and trucks aimed at the reduction of VOCs and PM emissions (Vergara and Haeussling 2007), to promote the professionalization of air quality experts and to create formal inter-agency initiatives. Most notably, the World Bank funded research aimed at generating an inventory of pollutants, which would later be a key component of PROAIRE II and the Metrobus Project.

The effectiveness of PROAIRE I was limited by the massive atomization of bus services that resulted from the demise of the city-owned system Ruta 100 and the explosion of semi-informal services such as the microbus. Under these conditions, the financing of new units of bus services was perceived as only moderately attractive and even as a risky proposition given the financial

constraints generated by the low fare requirements imposed by the city and the operational cost of exploiting a route under conditions of extreme competition. In addition, the number of low capacity, inefficient buses far exceeded the financial capabilities of the city and the loan. PROAIRE I also introduced the need to develop an integrated transportation system and the creation of corridors in which better quality vehicles could be used. However, the political conditions of the moment, namely centralized decision making and fragmented institutional structure, made this impossible and PROAIRE I ended up serving as an insufficient “patch” (parche) to a growing problem of road congestion and pollution created by the thousands of buses that began to surpass the metro and trolley as the main service providers for the city and the weak institutional capacity of local governments and agencies (Williams 2001; Romero Lankao 2007).

In the final years of the 20<sup>th</sup> Century, one event with deep repercussions in the local context took place. In 1995, a Mexican chemist, Mario Molina along Paul J. Crutzen and Sherwood Rowland became recipients of the Chemistry Noble prize for their on atmospheric chemistry and their discovery of the role of CFCs in the depletion of the ozone layer. While Molina was a faculty member at UCSD and MIT, the importance of a Mexican scientist receiving the most prestigious scientific award for his research on airborne pollutants did not go unnoticed in Mexico. Molina became an important figure and brought relevance and visibility to a problem that was already affecting Mexico City and also increased the statue of scientists in the country, who seemed to be more competent that corresponding authorities in understanding the City’s most pressing problems. Molina did not return to Mexico, and currently spends his time between MIT and an independent think tank based in Mexico that he leads and bears his name, Centro Mario Molina. Molina eventually became a leading figure in Climate Change research and lead projects specific to Mexico City. Molina’s success and recognition brought attention to climate change, and his work along with that of younger researchers, such as Claudia Sheimbaum (discussed in Chapter 4) was fundamental in linking a rising global concern, climate change, with a longstanding preoccupation and unsolved local problem, air quality<sup>2</sup>. As Romero Lankao (2007) argues, the influence that these scientists had in bringing attention, and resources, to efforts to address airborne pollution should not be understated.

### 2.3.2. PROAIRE II (2002-2010)

For the subsequent plan, PROAIRE II, which covered actions for the 2002-2010 period, the city fully adopted the language of climate change and added carbon emissions as one of the central focus of the proposed measures. PROAIRE II was conceived as a regional plan that is also linked to the Estrategia de Cambio Climatico, a climate change strategy developed with the help of Mario Molina, who took on this project from MIT and for which he recruited several other local scientists, among them, Claudia Sheimbaum, who would become Mayor Lopez Obrador’s Secretary of the Environment. The World Bank funded initial research to set the analytical base and the priority measures of the plan by identifying institutional weaknesses and links between pollutants, economic development, health and climate change. However, the Bank’s priority was an updated emissions inventory that included Green House Gas (GHG) emissions. To this end, the World Bank helped generate metrics defined in terms of economic costs of climate change and poor air quality,

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<sup>2</sup> Here I should make a note of the basic differences between air quality, a local problem, and climate change, a global problem. There are overlaps between both issues, but experts speak of these as distinct problems with diverging solutions.

for instance, health care cost and worker productivity. Under the advice of the World Bank the plan also included the development of more sophisticated air quality modeling tools. PROAIRE II also included more explicit recommendations that called for a deeper transformation of the transportation sector and not just the replacement of aging units with newer vehicles. The plan highlights the problems associated to the fragmentation of service and called for the implementation of bus transit corridors. In this case, the World Bank was also more explicit in its recommendation of increasing the participation of the private sector in the financing of transportation improvements and suggest the adoption of new transport solutions (which was in fact code speak for the BRT).

### 2.3.3. *Challenges for Comprehensive Air Quality Governance*

Despite the expansion of the scope of policies included in the three versions of the Air Quality Plan (PICCA, PRAIRE I and II), and the inclusion of more scientifically sound measurements, the three programs were very limited in their effectiveness. This is due to three important conditions.

First, the fragmented structure of local and metropolitan governments. As Romero Lankao (2007) and Arroyo and Rodriguez Alvarez (2014) argue, the decentralization of governance institutions in Mexico, while done under the assumption that it would generate increased democratization by bringing the state closer to citizens (Fox 2008), have resulted in fragmentation of power and the diminishing of capacity to implement and enforce plans and generate the institutional capacity for a challenge of the nature of environmental and climate governance<sup>3</sup>. In the case of the Mexico City Metropolitan area, air quality/climate governance requires the coordination of the state governments, the Mexico City government (GDF), the federal level SEMARNAT (Secretary of Environment and Natural Resources), and the Environmental agencies of the surrounding states: Estado de Mexico, Morelos and Hidalgo. In the case of Mexico City proper, the plans require the coordination of the Secretary of Environment (SMA), Secretary of Transportation and Roads (SETRAVI), Secretary of Housing and Urban Development (SEDUVI), along with the federal SEMARNAT. To add to the precariousness of these attempts, none of the plans previously discussed have an operating budget, are legally binding nor are institutionally linked to any agency that could oversee their implementation.

Second, is the issue of comprehensiveness. While the plans call for comprehensive approaches to air quality improvement that include issues as broad as fuel quality, emission monitoring and land use patterns, in practice the initiatives that are implemented are piecemeal and disjointed. For instance, the *Hoy No Circula* program, which should reduce the number of vehicles in the street, has generated the demand for more automobiles since it was not complemented by improvement in the public transportation or other alternative transportation modes. Being that there is no regulation in the number of vehicles that one person can own and the availability of low cost automobiles and financing has increased, many households have “solved” the problem of not being able to use their car once a week by purchasing a second or third vehicle. Similarly, federal level policies and poor local land use control created the conditions for the rapid growth of suburban low-income neighborhoods, increasing the needs for transportation, overcrowding public services and making

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<sup>3</sup> This sometimes leads to conflicting institutions. For instance, as one of my interviewees explained to me (personal interview w. AV) in Mexico City there exists an office of air quality, and an office for climate change that don't work together, despite their overlapping concerns.

purchasing a vehicle a necessity for working class families, despite the fact that urban sprawl was identified as an environmental challenge since PICCA in 1990.

Third, there is the question of political constraints, which is key to understand why Mexico City's government has not been able to transform its transportation system. As discussed in the previous section of this chapter, the atomization of transportation services has been a defining element that has resulted in the increase of pollutants and has made it extremely difficult to upgrade obsolete fleets and reduce the number of circulating vehicles. The local government for over two decades preceding the arrival Metrobus was not able to negotiate with transportation leaders and was constrained by the conflicting need to maintain a positive relationship with bus owners, meet a growing demand for transport and maintain the "social function" of transport (Benítez Navarro 2005). These conflicting goals generate a situation where city leaders demanded that *transportistas* improve quality of service and acquire new vehicles, which would increase their operating cost, at the same time that the city limits increases in the price of fares (Lopez Dodero 2013). Transportistas argue, in response, that the city-sanctioned low fares and intense competition makes it impossible for them to purchase modern vehicles and remain profitable. The fragmentation of routes, all managed independently through a system of political alliances, clientelistic relations and inherited privileges also complicates the possibility of creating an integrated transport system that could be centrally managed, with a single payment system, and that would not penalize multi-modality (currently, users must pay fare for each segment of their trip that involves changing buses/metro/trolley).

One final important aspect is the relationship between scientists and policymakers. While figures such as Mario Molina and Claudia Sheimbaum were key in "localizing" a global concern, as Romero Lankao (2007) argues, the kind of work that they have done remains disjointed from effective policy. The World Bank has been central to the strengthening the technical-scientific foundations of the plans, however, the three conditions discussed have also contributed to the difficulty of linking the work of think tanks and academics to local policymaking.

## **2.4. Democracy, Planning and Participation in Mexico City**

In this section I sketch the political context in which the current reforms are taking place and situate these within a larger process of local democratization and decentralization. The two most important elements that have shaped Mexico City's current political structure are: a) the protracted processes of local democratization that coexists with a parallel implementation of neoliberal urban policy; and b) the limited capacity of local institutions to plan for and manage a city of Mexico City's size, a condition that has not been eliminated by administrative decentralization and fiscal autonomy reforms of the last two decades.

### *2.4.1. Democratization and Fragmentation*

Due to its role as the capital and economic center of the country, Mexico City followed a different process of political and democratic transformations as the rest of the country. Upon independence the country inherited a hyper-centralized colonial structure in which Mexico City was the center of economic, political and cultural activity (Azpéitia 1984). This centralized structure was carried on throughout the nation building periods of the 1800s and even after the 1910 revolution, in which political and military powers from other regions were victorious, there was never an attempt to

undo Mexico City's prominence. During the decades of the post-revolutionary regime as the PRI consolidated its corporatist structure, Mexico City also became strategically important as a place where multiple interest from across the country met (Tenorio-Trillo 2013). In this period, Mexico City was not only the place where the institutions of power and governing were located, but also where the post-revolutionary modernization project would be more visible (Davis 1994; Tenorio-Trillo 2013).

While this situation represented an advantage in terms of the economic resources directed to the city, it also came with important constraints. Since the 1920s the government gave the city a special status and incorporated its administrative structure into the national (Federal) government. For almost 70 years the city, which would later be given the denomination of Federal District, was managed directly by the president as a department within the federal government, without democratic election processes for local officials and completely embedded in the PRI regime's corporatist state (Davis 1994; Arroyo Alejandro and Rodríguez Álvarez 2014; Rodríguez Kuri 2012). Mexico City's local governance and the politics associated with it, thus, were considered a matter of national politics. In the later decades of the city's pre-democratic period (1970s-1988) Mexico City exhibited two important characteristics that are relevant to this dissertation. First, the city embodied a contradiction of a highly centralized, authoritarian and presidentially-controlled regime that simultaneously functioned within an organizational structure that was internally fragmented through out multiple agencies and sixteen local districts called Delegaciones. And second, despite the multiple forms of popular organization and corporatist-sectorial links between special interest groups and the government, the city lacked formal mechanisms for citizen representation in government and policymaking (Álvarez 2006).

#### *2.4.1. Democratization*

The protracted process of democratization of Mexico City can be traced back to post-1968 student movement period. For many decades the national government had been dealing with tensions between meeting public demands for urban services and the demands for capitalist growth, which was reflected in increasing tensions between the different interest groups of the corporatist regime (Davis 1994). The national government solved these tensions by creating special institutions for Mexico City, such as the advisory board (Consejo Consultivo) and special commissions, which were restricted to the elites and a handful of representatives from the interest groups that had more power, such as unions or leaders of the Popular sector (Sánchez Mejorada and Álvarez 2003). Citizen mobilization on the other hand, was mostly reactive and rarely did citizens get involved in decision making processes.

In the 1970s, however, there is an increased mobilization of different sectors, many of which were not associated with the corporatist regime, and a rise of a more established intellectual opposition that created spaces for open critique of policies (Sánchez Mejorada and Álvarez 2003). By 1978 the government responds to pressures for more spaces for direct participation with two changes. One was the creation of Delegaciones and *comités vecinales* (neighborhood committees). Delegaciones have the objective of creating local level governments, divesting some power from the central government into 16 different districts. Delegados, however, were designated by the president. The second was the institution of *comités vecinales* which were designed to allow for citizen participation on some plans and policies that affected citizens at a localized (neighborhood) level.



These mechanisms however, were mostly aimed at formalizing certain forms of citizen involvement that were perceived as less radical than what some more politicized groups, such as the Movimiento Urbano Popular (MUP), proposed such as autogestión (self-governance) (Sánchez Mejorada and Álvarez 2003).

By the early 1980s citizen participation was characterized by diverging dynamics. On one hand, there is some citizen-led participation taking place on “colonias populares” in which the MUP and other organizations had successfully carved spaces (Moctezuma 2001; Alicia Ziccardi 1997). On the other, *comités vecinales* are effective as mechanism to inform and allow for some input from neighbors on local plans and small scale projects. These, however were mostly effective on upper and middle class neighborhoods where residents expressed concerns on land use changes and construction of commercial spaces.

The devastating September 19, 1985 earthquake came to transform not only the physical but also the political landscape of the city. In the immediate aftermath citizens organized to collaborate in rescue actions and provide shelter and care to victims. These actions exposed the limited capacity of the government to react and proved citizen’s capacity to self organize and deal with complex urban problems (Monsiváis 1987; Cuevas 1987). In the following months *comités de damnificados* successfully mobilized and confronted the state around housing and “the right to stay” in their neighborhoods. These mobilizations took place in central districts that were more intensely affected such as Centro Histórico and surrounding neighborhoods such as Colonia Roma. By mobilizing their right to stay, low-income households that had long occupied old buildings, were able to resist government’s plans to raze areas that were considered not productive, but also this experience strengthened community organization and served as a platform for political mobilization (Álvarez 2006; Moctezuma 2001; Rabell and Mier y Terán 1986).

In the following years, much of these efforts evolved into larger demands for a transformation of state-citizen relations as citizens demanded effective instruments for participation in programs, decision of plans and policies. This meant in many instances, restructuring neighborhood-based mechanism for organization and participation. By 1996 these demands, along with external pressures for decentralization, resulted in a local reform that instituted election of the Jefe de Gobierno. In 1997 the city had its first election, which was won by Cuauhtémoc Cardenas, who ran under the leftist PRD party he had co-founded years before. Despite these reforms, the city government lacked important forms of autonomy (for instance for generating its own budget), the city structure remained centralized and citizens were not able to elect delegados before the year 2000.

#### *2.4.2. The PRD: Ciudad para Todos*

The arrival of the PRD to power opened the possibility of a more substantial reform of state-society relations, after all, Cuauhtémoc Cardenas, as well as the three subsequent *jefes de gobierno* (Lopez Obrador, Marcelo Ebrard and Miguel Angel Mancera) built their platforms around three issues: Democracy, Inclusion and Equality. In practice, however, these promises have been more difficult to implement. The PRD inherited from the prior PRI regime a very strong system of authoritarian management, political corporatism and lack of transparency that has been difficult to dismantle (Cadena-Roa and López Leyva 2013). The PRD administrations have also tried to implement democratic reforms under the slogans that change each administration but that retain an overarching

notion of democratic co-governance such as “Ciudad para Todos” (Cardenas 1997-1999) or “Gobernando Juntos” (Miguel Angel Mancera, 2012-2018). For example, General Development plans since 1998 have included a democratic and participatory city as one of its main objectives, however, this goal has not been necessarily met. The city has also enacted a Citizen Participation Law and instituted the Referendum and public consult as two mechanisms for citizen participation. Public consults, however, are not legally binding and often are undermined by extremely low voter turnout.

Demands for citizen inclusion in planning were originated by social movements and citizen organization were instrumental in propelling the PRD to power in Mexico City. However, after three PRD administrations the implementation of formal channels for citizen participation has also resulted in the de-mobilization of civil society. In many cases, direct citizen-state interaction has been replaced with mechanisms in which NGOs serve as mediators in consensus processes (Sánchez Mejorada and Álvarez 2003; Alicia Ziccardi 2009; A. Ziccardi and Enriquez 2003). For instance, the MUP has lost relevance as a citizen-led agent of urban policy. At the same time clientelistic relationships have managed to survive, mostly, in low-income neighborhoods. This is not a situation unique to Mexico City, critical scholars have exposed the compatibility of citizen participation with neoliberal schemes (Caldeira 2008; Purcell 2009; Caldeira and Holston 2005). These critiques argue that participatory planning mechanisms reproduce power inequalities (Raco and Imrie 2000) and that inclusion and diversity can also obscure and legitimize authoritarian forms of urban governance (Baiocchi and Ganuza 2014; Wilson and Swyngedouw 2014).

Citizen input around land use changes and infrastructure remains a central concern of citizen mobilizations that have mixed results. Middle class neighborhoods have been successful at stopping real state projects that affect them negatively, while low income citizens have not been as successful at stopping projects (Sosa Lopez 2017) and punitive policies directed at removal of informal activities and economic revitalization (Davis and Reyes 2007; Becker and Müller 2013; Crossa 2009).

#### *2.4.3. Decentralization*

In addition to the challenges of democratic and transparent governing, the city government continues to deal with a great degree of institutional fragmentation. Currently, the management of the city is divided between the central government and the delegaciones. The central government decides on city-wide policy, development plans and the provision of social services, security and major infrastructure such as main thoroughfares, public transit, water, etc. Delegaciones manage provision of some public services and maintenance of local infrastructure, such as secondary roads, parks, sidewalks and have the capacity to produce partial development plans and reject some provision of city-wide plans, for instance, with certain zoning and permitting provisions. This dynamic generates conflict and obstacles for territorial management.

Delegados were first designated by the president but since 2000 they are elected by residents of their corresponding district. More importantly, while all the elections since 1997 have been won by a PRD ticket candidate, delegaciones have become far more plural, with delegados being elected from all three major parties (PRI, PAN and PRD). Today, delegados are highly competitive elected positions that are considered to be a step into a candidacy for Jefe de Gobierno or ascendancy into

important position within political parties. Therefore, delegados increasingly look to cultivate an identity that distinguishes them from other delegados, even from the same party, and to develop their own agenda and a legacy of public works and policies that can be mobilized as part of their political platforms (Gaona and Domínguez 2015). This furthers the possibility of conflict, as delegados often mobilize conflict around laws and policies originated at the central level to generate sympathy with their constituency. A case in point will be discussed in Chapter 5 with delegado Alejandro Fernandez from Delegacion Cuahutemoc.

## 2.5. Conclusion

As this chapter has shown, transportation policy is located at the intersection of important spatial, economic and political dynamics. The successful implementation of sustainable mobility projects implies not only the adoption of new technologies, but also the reform of agencies at multiple scales of government and a transformation of long-standing political arrangements between the city and service providers. As a result, política de movilidad has implications for the the management of inequality, urban sustainability and the institutionalization of democratic planning mechanisms.

In terms of addressing urban inequality, sustainable mobility projects can impact the city's overall accessibility and the quality of different forms of transportation. Patterns of class segregation and the fragmentation of urban space and an investment bias toward the private automobile have had a negative and uneven impact in quality of life of all city residents. Historically the city has been divided along economic classes with low income neighborhoods in the east and periphery of the city. The economic transformation of the last three decades and intentional redevelopment of central districts has lead to the concentration of economic activity along the Reforma and Insurgentes corridors. This process has had the effect of increasing the cost of housing in central areas and today poor households are locating farther than ever from the center of the city. In this context, poor workers face long commutes in low quality buses and the overcrowded metro system. This situation has worsened over time not only because of longer distances between low income households and job centers but also due to the de-regulation of transport provision. Since the 1980s semi-regulated service bus owner-operators, called *transportistas*, have become the main provider of service in the city. Historically, the relationship between *transportistas* and the city has been contentious and led to diminishing quality of service, which unevenly affects poor residents who rely on mass transit. Before the arrival of the BRT, the city had been unable to generate accords that would bring substantial improvement to service. Similarly, sustainable mobility projects can undo investment biases toward the automobile and improve pedestrian infrastructure.

Política de movilidad projects have been defined as urban sustainability interventions. Transportation improvements have been included in air quality plans for two decades. However, the effectiveness of improvements in the past has been limited by the lack of effective coordination between agencies and local government have impacted environmental regulation in the past. Decentralization reforms, though generally considered positive, have further fragmented the responsibilities and power of agencies. Effective sustainable transportation planning requires coordination between transportation, urban development and environmental agencies as well as laws and institutions that can span across government levels.

Finally, movilidad projects have been defined as part of a democratizing and right-expanding agenda. Certainly, política de movilidad is a policy space in which multiple actors from within and outside the state intervene. The agendas and plans that guide these projects, however, are conceived by a narrow set of actors, mostly experts and NGOs and citizens have very little say in which policies will be adopted. As I will show in the following chapters these projects rely on public private partnership mechanisms that are supposed to improve quality of infrastructure and services. Finally, the adoption of technocratic mechanisms and neoliberal schemes into a progressive agenda has become a common characteristic of the PRD approach to urban governance. In the following chapters I will show how these spatial, economic, social and political dimensions have shaped the development of política de movilidad.

## Chapter 3. Bus Rapid Transit: Policy Innovation and Political Retrofitting: Assembling a new Policy Space

“The World Bank makes designs from an office desk. They come and turn everything upside down, just look at how they went about Transmilenio in Bogotá and then in Santiago (Transantiago). With thousands of policemen and the army to clear the streets. But we are different, we are government of the left, we understand social issues and this system is not about reducing employment, we already have a lot of unemployment. So what did we do? We generated a model that corresponds to our vision from the left. We created a public private partnership in which the old bus owners have a main role but they are regulated by the government. And this model works, compare this with Bogotá, right now in Bogotá they have a huge problem with Transmilenio... I think we found an effective formula. I don't think we need to pay that much attention to the World Bank....”

Armando Quintero, Secretary of Transport 2006-2012

### 3.1. Introduction

Metrobus, the city's BRT system, is a public-private partnership inaugurated under mayor Andrés Manuel López Obrador (2000-2006). In its first iteration the system replaced 372 small capacity buses that operated along Avenida Insurgentes as individual concessions. This happened after a several-month-long process of negotiation with concessionaries who formed a single corporation and became investors and operators of the system. Metrobus was, from the start, embedded in intense discussions about the environmental future of the city, the role of the state in retrofitting infrastructure and the approach that the PRD would take in reforming transportation and urban planning. From its inception, the BRT project was framed as a two-pronged intervention: a greenhouse emissions reduction project *and* a redistributive policy, in the sense that it would take back space from private automobiles and assign it to public transit users. As the product of a collaboration with international development institutions and the private sector, proponents argued the BRT would incur minor cost to the city and not require massive subsidies (like the ones that keep other mass transit systems operating, most notably the Metro).

Policy actors have come to consider the Metrobus--now a six-line system--an important and successful example of sustainable transportation in the city. Scholars have also examined BRTs from other angles, analyzing, for instance, the political economy of transport sector reform (Flores Dewey 2013; Lopez Doderó 2013), or the travel and mutation of this technology as a global best practice (Montero 2017a; Wood 2014). Instead in this chapter I trace the assemblage of the Metrobus as an exemplary case of how infrastructural works are vested with multiple meanings as they are built and put to work (Fischer 2000) and as a technology that came to disrupt existing political and cultural structures (Fariás and Bender 2010; Beauregard 2015) resulting ultimately in a distinctly new policy space.

By examining the relational politics and processes through which the Metrobus was implemented and scaled I develop three main arguments. First, I argue that despite the historically contentious relationship with existing *transportistas* (concessionaires) the Metrobus enjoyed a relatively smooth implementation thanks to a handful of scientists, experts and public officials across multiple scales

that lent the BRT necessary technical and political legitimacy. Second, I argue that the implementation of the project transformed discourses around effective air quality management by shifting and narrowing them to the measure of GHG (Greenhouse Gas Emissions). This new measure was in turn used to showcase the project as a success despite the fact that the existing governance and institutional constraints remained largely unresolved. Third, I argue that as a result of their work on the Metrobus a constellation of actors (international development and philanthropy institutions, experts and NGOs) were resituated as influential for transportation policy. Indeed, thanks to the Metrobus project, a group of non-state organizations with links to global international development networks became central actors in number of sustainable transportation projects. These actors, along with a group of progressive city officials, came to define a series of institutional reforms and innovative technologies as indispensable interventions to make the city more sustainable and more democratic. These actors then were able to set the rules of the game for the new policy space I examine in the rest of the dissertation: *política de movilidad*.

### **3.2. Articulating and Legitimizing the BRT**

The *Proyecto Metrobus*, the official name of the plan for the implementation of the BRT system in Mexico City, was born in 2002 as part of a new World Bank project in the city called “Introduction of Climate-Friendly Measures in Transport” (P059161), which was linked to the work that this institution had been doing in collaboration with the city for PROAIRE II (discussed in Chapter 2). Metrobus received funds from the World Bank and from a grant originated in the World Resources Institute as part of a project to promote the BRT globally.

There were two important reasons why the city partnered with these institutions. First, the BRT technology had recently been “picked up” by the World Bank as a best practice (Interview with Vergara and Sheimbaum) compatible with the objectives that the Bank had been promoting for almost two decades in Mexico, namely, a quantifiable reduction of emissions (and more recently Green House emissions) and a transportation sector reform based on regulated private sector participation. Second, the BRT was selected thanks to the work of a local scientist and politician, Claudia Sheimbaum (whose research focuses on energy consumption and climate change). Sheimbaum facilitated the linking of a global epistemic community with the agenda of the PRD city government. In the following paragraphs I focus on the work that Claudia Sheimbaum and her colleagues (both in the city government and in the international climate sciences community) did to *legitimize* the BRT. They did so by framing it as a piece of working infrastructure and a technically and politically “clean” policy. They also procured and organized a unique funding structure that had important effects on how the the project would unfold.

Claudia Sheimbaum completed a PhD at Universidad Nacional Autonoma de México, UNAM and conducted her research on climate science at the Lawrence Berkeley Laboratory under the supervision of Lee Schipper in 1994.<sup>4</sup> Sheimbaum is currently a member of an IPCC panel where she collaborated with Mario Molina in projects related to Mexico. In addition to her credentials as a scientist, Sheimbaum is a PRD party member and is closely associated to Andres Manuel Lopez Obrador. Sheimbaum is married to Carlos Imaz Gispert, an UNAM academic who was a founding

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<sup>4</sup> Schipper (d. 2011) was an energy efficiency expert and international environmentalist. He was senior researcher at Energy and Resources Group at UC Berkeley, Lawrence Berkeley National Lab, the International Energy Agency in Paris, Shell International among other institutions.

member and local head of the PRD in Mexico City and a close collaborator of Lopez Obrador's campaign. In 20XX, Sheimbaum had not run for any elected position (although at the time of this writing she is an elected Delegada in Tlalpan) but had previously been involved in UNAM politics, which are closely linked to the PRD. In short, Sheimbaum's professional and political location put her in the center of both a global epistemic community (cite Hass) of climate scientists and development institutions interested in sustainable transport and in the political inner circle of Lopez Obrador. Since early on his political mandate, Obrador, a leftist, populist mayor, signaled his intention to run for the presidency, as he did.

Sheimbaum returned to Mexico City from the Lawrence Berkeley Lab in 1995 and took a position as an energy scientist at the Engineering Institute at UNAM. At this position, she was involved with some of the most renowned scientists in the country, such as Nobel Prize winner Mario Molina. Because her field of expertise is residential and industrial energy use and climate change, Sheimbaum was also involved in an emissions inventory project that the World Bank had been promoting. In 2000, Lopez Obrador invited her to join his cabinet as Secretary of the Environment (SMA), a position that she kept for the entirety of the Obrador's mayoral tenure. Sheimbaum brought into the secretariat's agenda her preoccupation with curbing air pollution emissions. In her administration, SMA stressed the role that the transport sector could play in lowering emissions. Sheimbaum had previously collaborated with Walter Vergara, a Colombian World Bank official that was in charge of the Air Quality projects for Latin America. She was well aware of the work that this institution had been doing in reference to the ambitious but rather ineffective PROAIRE air quality plans.

At the time, as Sheimbaum told me, city officials and experts were considering a more substantial intervention in transportation services. While the term BRT was not necessarily used, they were considering the consolidated bus corridor as a solution that would be based on what Curitiba had done in the early 1990s. The corridor, as it was described in several plans and documents, would create the conditions for a single company to cover a route, with limited stops and a more efficient fare collection system. The idea behind corridors is that by consolidating routes, buses of higher capacity and more modern technology could be used. In turn these would be more financially sustainable as travel demand would be met with fewer units. Ultimately, discontinuing the use of older units and shrinking the overall size of the fleet would help the city lower emissions.

With the funds that the World Bank provided under PROAIRE II the city had conducted studies for the implementation of a corridor along two avenues: Avenida Insurgentes, one of the city's most important avenues, that functions as a linear CBD, and Avenida Iztapalapa, an avenue that connects the low income Iztapalapa, the city's most populous delegación with Circuito Interior and the rest of the economic center of the city. These plans, however, had not been put in practice because of the city's incapacity to organize existing bus operators who kept putting pressure on city officials to maintain their rights to operate their routes.

Historically, *transportistas* have been wary of the local government and see politicians as actors that seek personal benefit and financial gains from new projects and plans (Davis 1994; Flores Dewey 2013; Benítez Navarro 2005). As with other sectors (such as the trash collection) clientelistic and patronage relationships have shaped the politics of transportation and these

dynamics usually take precedent over the technical, financial and environmental needs of a particular moment (Berthier 2006). In my interviews with transportation leaders, I found that among the most important issues in negotiation was the question of trust and transparency, which is slow to achieve (Interview with EJ, 12/10/2013) Moreover, transportistas have had very little motivation to modernize their fleet given the conditions imposed by the city and the impossibility to guarantee profitable business models (Interview with EJ, 12/10/2013 and MH, 11/19/2013) while the city was well aware of the environmental impact of the current state of transportation with its fragmentation and low quality buses, the politics did not allow for much room to implement reforms.

According to Sheimbaum, the possibility of re-thinking the problem of fleet modernization arose when she was contacted by Lee Schipper, who proposed a collaboration to implement a BRT sponsored by the Shell Foundation. Schipper had just taken a position as Sustainable Transportation director for the World Resources Institute (WRI) and one of his first projects consisted in implementing the BRT in three cities in Mexico, China and Chile. Sheimbaum was very receptive to the WRI's plan and approached Walter Vergara from the World Bank to propose that the BRT project be linked to the other initiatives that the Bank was funding, namely, PROAIRE II's emissions inventory. With this, the impact of the BRT would be evaluated by measuring emissions along that corridor before and after Metrobus. The World Bank agreed to collaborate and, most importantly, made Global Environment Facility Program (<https://www.thegef.org>) funds available by proposing it as a Clean Development Mechanism (CDM) project. With this, the project was framed in the language of carbon control (While, Jonas, and Gibbs 2010) linked to climate change adaptation efforts, making it possible for the city to access to carbon credits from the emission reductions. These could be sold and used toward other projects.

Considered as a climate change and air quality improvement scheme rather than a transportation project, Metrobus was housed within the Secretary of the Environment (SMA), rather than within the Secretary of Transport and Roads (SETRAVI). This, as Sheimbaum acknowledged, was intentional and beneficial. It freed the Metrobus team from the vicious relationship between the SETRAVI and the *transportistas* (Interview with EJ, 12/10/2013 and CS 10/15/2013). Since the project was going to be a private-public partnership, the city would be responsible for investing in infrastructure and stations, but the cost was partially offset by money from a special fund called "excedentes de petroleo" or extra revenues that the federal government received from oil sales (PEMEX).

Understanding the origins of the funds used for Metrobus and the unusual funding structure that developed is crucial as this gave the project unusual autonomy and resulted in elevating new key policy actors. Metrobus was a project that was not funded with loans or issuing of bonds. Instead all the funds came either directly from the private sector (in this case, the previous bus owners-operators of Ruta 2) or from grants from the World Bank, who also channeled money from other sources (such as the German government) and the GEF. An important source of funds was the Shell Foundation, the underwriter of Lee Schipper's project at the WRI.

The funding that came from the Shell Foundation demands special attention because it lead to an important transformation in the transportation governance structure of the city. These funds were



channeled through the World Resources Institute but the rules of the Shell Foundation prohibited that the money go to local government. These rules required that the funds be directed to a local NGO. In the early 2000s there was not a single organization working on sustainable transportation in Mexico that could receive the funds. While there were a handful of transportation consultants, none of them classified as NGOs. To move forward, SMA reached out to Centro de Estudios Interdisciplinarios en Biodiversidad y Ambiente (Interdisciplinary Center for the Study of Biodiversity and the Environment) or CEIBA, an NGO funded by Julia Caravias, one of the most important figures in Mexico's environmental movement. This NGO was well established but did not work on sustainable transportation. In response to this request a CEIBA created a spin-off organization, called Centro de Transporte Sustentable (CTS) which rather than developing as an autonomous NGO became permanently linked to the WRI.

CTS, which was later renamed CTS-Embarq, began operating in 2002 and soon become the country's most important sustainable transportation NGO. The work of CTS-Embarq, as I will discuss below, was central to creation of política de movilidad in Mexico City and in promoting transport reforms across the country. The first CTS leader, José Luis Samaniego, was replaced in 2004 by Adriana Lobo, a Brazilian transportation consultant that had experience developing BRTs in South America and had previously collaborated with the World Bank in Bogota's Transmilenio. With Adriana Lobo, CTS was able to provide extensive technical assistance for the development of the BRT system. They also helped shape the understanding of the BRT as not just a single intervention but as a larger sectoral reform. In Sheimbaum's words,

Adriana Lobo helped us to understand that the BRT is not just a public work project but a transportation re-organization project. That it was not only a matter of separating buses from cars but that it represents a whole new business structure, that it matters that you no longer have a bus owner-operator (Interview CS, 10/15/2013).

As Sheimbaum's quote shows, the role of this kind of expert was indispensable in introducing the design criteria but also, from early on, in developing the idea of an integrated transportation system. This ultimately became one of the most fundamental ideas behind política de movilidad. CTS's involvement is also important because it constitutes the first moment when non-state actors that self-define as civil society, took on a central role in transportation policy-making.

In summary, the Proyecto Metrobus was quick to implement in a short period of time and was backed by an epistemic community that agreed on its effectiveness and legitimized the intervention. This was possible because Claudia Sheimbaum successfully articulated local and international interest and financial resources for the project. Moreover, from her position as an energy scientist the Metrobus was defined as a technically-driven project backed by an international community of transportation experts.

### **3.3. Adapting the Office Desk Model: Making the BRT a Project of the Left**

The Metrobus, as others have documented, is part of a broader repertoire of mobile best practices (Montero 2017a; Wood 2014). In Mexico too, this best practice was mobilized. Early adopters of the system, such as Bogota's Peñalosa and Curitiba's Jaime Lerner, had began to visit Mexico, invited by CTS and the World Bank to promote the BRT among local officials. At the same time,

existing studies pointing to the benefits of replacing low capacity bus service with a centrally managed BRT, largely based on Bogotá's Transmilenio, were being circulated by experts as proof of its success (Montero 2016, 2017). As Sheimbaum told me, "the BRT was in the air...let's say that yes, Curitiba and Transmilenio made a huge mark." Indeed this global best practice had to be localized, or translated in various ways.

Given the political imperatives of the PRD as well as the existing political dynamics of the transportation sector, proponents of the BRT had to convince existing bus owners and the general public that a transportation reform--in part inspired by these global models-- made sense in the context of Mexico City and could be feasibly implemented in a democratic way. This task implied making a global practice compatible with the left project of the PRD. To do so, Sheimbaum and the CTS worked to minimize social conflict and generate visibility and support from the public.

Against this backdrop, Avenida Insurgentes emerged as the optimal site for the Metrobus. It is one of the two most important avenues in the country, comparable only to Avenida Reforma in terms of its visibility. Building a BRT there would give the project a great deal of status. But perhaps more importantly, unlike other sites that were considered, the Avenue was served only by one group of bus owners, who operated as 'Ruta 2'. This facilitated the negotiations between the city and *transportistas*. As Sheimbaum admitted, "Insurgentes had [a certain] virtue...we only had to negotiate with one bus organization (Ruta). Only Ruta 2 runs along Insurgentes and that is a great advantage because you don't have to negotiate with 8 routes at a time" (Interview with CS, 10/15/2013). The negotiation with existing *transportistas* was one of the most controversial components of the project as it was a moment of friction between the prescribed solution offered by the World Bank and CTS-WRI and the political imperatives of the local government.

As Sheimbaum explained, the process of adopting this best practice was shaped by a series of negotiations. First, there was disagreement between the city and experts, who wanted to award the system through an open bid process to a company with proven capacity to operate a large fleet. The PRD city administration opposed this, and instead wanted to maintain existing bus operators and incorporate them in the new system without a formal bid process. Claudia Sheimbaum narrated this as follows:

Adrian Lobo (from CTS) and the World Bank told us that our model was going to fail because we were bringing in all the existing bus owners into the project... and I told them, the only way in which we can eliminate conflict is to have every single existing bus owner with a permit to operate on Insurgentes keep his right to work. You are talking about rights that transportistas previously acquired and if you do a public bidding process then the next day you will have all the bus owners marching on the street. That would be the first problem" (Interview with CS, 10/15/2013).

Framing the *transportistas* concessions as rights, the PRD administration opted for not opening the project up to a bidding process. But there were other reasons for that too. She continued,

The second problem is that if you actually do a public bidding process it is going to be won by a large corporation. And if you want to concentrate all the profit of transportation in the city...then give it to a corporation. But we had a socially conscious understanding

of the problem. The small buses have a lot of problems, but they also have one virtue: they distribute income generated from public transportation. In the city we have about 100,000 families depending on income from buses...and I think this is a great virtue of Metrobus, and that approach is what made negotiations possible. [Transportistas] decided to migrate to our system with the certainty that they would not lose their livelihood.... (Interview with CS, 10/15/2013).

According to Sheimbaum a bidding process would necessarily be won by a large corporation and therefore the concentration of potential revenue and income from this major route. Instead, seeing the Ruta operation as a form of distribution of income they opted to negotiate directly with the transportista organization and present this as a way for the *transportistas* to keep their income and livelihood. Of course, this was in part a response to the constraints resulting from a highly politicized transport sector (as discussed in Chapter 2).

Armando Quintero, who was SETRAVI secretary for Marcelo Ebrard in the following administration also characterized their approach and in particular the unique way in which Mexico's PRD dealt with the potential conflict that a project like the BRT could engender as follows:

The World Bank makes designs from an office desk. They come and turn everything upside down, just look at how they went about Transmilenio in Bogotá and then in Santiago (Transantiago). With thousands of policemen and the army to clear the streets. But we are different, we are government of the left, we understand social issues and this system is not about reducing employment, we already have a lot of unemployment. So what did we do? We generated a model that corresponds to our vision from the left. We created a public private partnership in which the old bus owners have a main role but they are regulated by the government. And this model works, compare this with Bogotá, right now in Bogotá they have a huge problem with Transmilenio. With us is the opposite, little by little we are perfecting our public-private model. The model is self-sustainable, with guaranteed returns on investment. I think we found an effective formula. I don't think we need to pay that much attention to the World Bank.... (Interview with AQ 12/14/2013).

Like Sheimbaum before him, Quintero describes the uniquely Mexican model, as one that fit the PRDs "project of the left" by generating a model in which the *transportistas* were included. The resulting "public-private partnership" then was considered an effective formula.

I asked him if the World Bank pressured them to stick to the model,

No, I mean, we listened to their suggestions and the most important thing is that we agreed in many things and we are making progress into better mobility in the city. We agree on where we need to go, but not on how to get there. This transformation was very difficult, negotiating with bus owners. I had to do serious social engineering, just look around, I did not use the police, there was no repression, I did not bring out riot squads. It was all with negotiation and social and political agreements. For example, you think it was easy to get rid of 500 bus owners from Avenida Lazaro Cardenas? They had been working that street for 50 years. And we negotiated, we did not send a single person to jail (Interview with AQ 12/14/2013).

This quote, shows how public officials conceive of what distinguishes the PRD administration approach from the one prescribed by international experts and adopted in other cities. In diverging from the best practice model (office desk models) and framing their decision as a question of “social justice”, these actors define Metrobus as an example of autonomy from external interests even if in the same process they struggle to exert autonomy from local politics.

Though Sheimbaum and Quintero describe the negotiations with *transportistas* as a relatively swift process, the actual process of negotiation with Ruta 2 transportistas (and later other organizations) was a delicate process in which matters of trust, transparency and political will were at the forefront. According to my interviews with *transportistas* leaders and city officials, the city used two important tactics to enroll the *transportistas* despite their lack of trust.

First, the preliminary studies that had been done with World Bank funds allowed the city to have better arguments when it came to negotiating the financial conditions of the new contracts with *transportistas*. The city felt confident it had accurate figures to present as evidence that allowed officials to avoid situations in which *transportistas* could make unfounded claims about ridership numbers and the economic effects of adopting the system. Similarly, the city could argue that they were using hard data and not responding to political motivations or trying to take advantage of the *transportistas*. In other words, having adequate studies on ridership, demand and financial operation done by international experts allowed the city to present itself as a transparent and technical actor. Second, with the support of the World Bank and WRI, the city was able to show *transportistas* the benefits of the BRT, inviting them to visit Bogotá and take an “educational tour” of Transmilenio. As others have argued these ‘learning tours’ are important consensus builders (Montero 2017, Wood 2014). My interviews confirmed this. For *transportistas* this was an important experience because it allowed them to see first hand how the system worked in other contexts and could work in Mexico City.

Within the city structure, the Metrobus Project was done as a coordinated effort between SMA, SETRAVI and Contraloría, the public finances branch of the local government. The negotiation with Ruta 2 was done with representatives of SETRAVI from the office of the Mayor but was led by Claudia Sheimbaum, who was perceived as a technically-minded actor free from the politics as usual of SETRAVI. Despite the critiques from the World Bank and CTS, the city decided to create a company with the existing bus owners who would co-own the corridor with RTP, the small city-owned bus company. The city would also make a direct investment in the conditioning of streets and stations. The negotiation with the bus owners was complicated because there were two groups with diverging views on the project. The older owners were not as welcoming of the project as younger and more educated owners. As one of the leaders told me, bus owners mostly have very low education levels and older owners often have only elementary school education and are less open to new ideas. In the end, the bus owners were forced by Sheimbaum to elect one single representative for the negotiation process and they elected one of these younger owners, Jesus Padilla, who quickly embraced BRT. He later became a champion of política de movilidad in his role as president of Asociación Mexicana de Transporte y Movilidad, a newly formed association of transport providers. Bus owners were given a set amount of money in exchange for each of their buses and these funds became the start up capital for a company called CISA (Corredor Insurgentes,

SA). CISA used the funds for the purchase of vehicles and initial operations cost. The city's small public bus company RTP also contributed with 25% of the capital. The corridor was legally funded on March 2005 with the creation of a new entity, Metrobus. Metrobus was an *organo publico descentralizado*, that is, a semi-independent public entity that could manage the system's network, fare and overall strategic and day-to-day coordination among different lines. Under Metrobus' supervision CISA and RTP would be responsible for the operation and management of the Insurgentes line. This centralized operation was necessary to facilitate the future expansion of the system in which other companies, just like CISA, would operate different lines that would come to replace multiple *rutas* running low-capacity buses.

By adapting the BRT model in producing the Metrobus in the ways described above, the PRD was able to keep its democratizing promise in at least two ways. First, by modifying the World Bank and CTS recommendations, it created a business model in which existing bus owners-operators, who had long ago negotiated their right to operate along Insurgentes, were able to retain these privileges, although now in the form of shareholders. With this arrangement the city avoided conflict but also showcased their commitment to redistribution. Second, the Proyecto Metrobus team was able to improve transportation provision for low income residents. By creating Metrobus as an *an organo descentralizado* the city effectively took the first step into the re-regulation and expansion of transportation service without resorting to increasing expenditures through a massive expansion of its public bus company RTP. In other words, the BRT's model made it possible to improve a public service and re-gain political autonomy at the same time that it streamlined operational and management costs.

### **3.4. Making the BRT a Visible Success**

City officials and transportation NGOs speak of Metrobus as a successful project that proves the capacity of the city to reform its transportation sector and improve the environmental conditions and the quality of life of its residents. However, Metrobus did not actually add new services or travel options, but rather replaced low quality semi-regulated services with a BRT system that is centrally managed. The system is more efficient than the previous low capacity bus service but is often overcrowded and, while faster than older services, lacks express lanes or the convenience of an elevated or subterranean system (*La Jornada* 2012) . Moreover, in recent years, financial hardships of some of the lines has come to surface, mostly, because the service life of BRT buses turned out to be shorter than expected and money has had to be invested in purchasing new units earlier than planned (Interview with AQ, 12/14/2013, MH, 11/19/2013). Other important critiques center on the fact that a BRT can only work with large routes, or *trunk lines*, while doing nothing to improve *feeder lines*, that is, smaller routes that can reach far and peripheral neighborhoods or routes that only have significant demand during commute hours. Those routes, so far, continue to have the same problems as before the BRT arrived and improvements to those services, for the time being, have been deferred to prioritize the highly visible trademark of transportation reform, Metrobus.

But while these critiques and shortcomings can be debatable, the Metrobus has one metric by which it has consistently made claims to its success: emissions reduction, which was, after all, its original objective. The World Bank and local scientists' emissions inventories show that Metrobus L1 along Insurgentes has reduced emissions of CO<sub>2</sub> by 300,000 tons in its first six years of operation ((New

York City Global Partners 2012). Moreover, the whole system reduces over 110,000 tons of CO<sub>2</sub>, 690 tons of NO<sub>X</sub>, 2.8 tons of PMs and 144 tons of Hydrocarbons each year. As a result, since the project was certified as a CED, it qualifies for carbon credits. The city has been trading these credits, receiving monetary awards in excess of \$800,000 according to a 2012 report by the New York City Global Partners, which profiled the Metrobus as a best practice in global innovation (New York City Global Partners 2012).

From the beginning Metrobus was mobilized by the city government as a way to show a commitment to sustainability, transparency and scientifically-based policymaking. Sheimbaum and CTS staff saw Metrobus Linea 1 as a very important first step into developing a new system that would extend over 10 lines and could be financially self-sustainable. Thus, for the system to be able to expand beyond the first line, it had to have a very successful first stage. Selecting Avenida Insurgentes as the first intervention responded to the perceived, and real, opportunity that dealing with only one group of *transportistas* represented. Moreover, other experts told me that the actual travel demand for that corridor would easily meet those stipulated in the plans. In fact, other consultants that did not participate in the program argue that the system's current overcrowding is the result of the city trying to guarantee that the transportation offer would be constantly met and that other technologies would have been more appropriate for Insurgentes, such as light rail or metro (Interview with AM, 10/29/2013). Starting the BRT in Insurgentes was strategic not only because of the relative advantage of dealing with only one group of *transportistas*, it also warranted visibility. As Walter Vergara from the World Bank told me in an interview: "Imagine the kind of message that we are sending to the federal government (about sustainability) when the BRT passes right in front of the Secretary of Energy offices". In Sheimbaum's words,

Insurgentes' main virtue is that it's the largest avenue in the city, if you do BRT there and it is successful, then everything else is feasible, you set the example. ...And now it's even easier because Metrobus already exists and bus organizations already know what you are talking about (Interview with CS, 10/15/2013).

As I interviewed current and former officials that had collaborated on earlier and more recent stages of Metrobus it was evident that Metrobus signaled more than just an improvement to public transportation. To these officials and experts, the BRT was also embedded in larger visions and aspirations of modernization, cosmopolitanism and urban reform that had been embraced by the left-leaning PRD regime. In an interview with Armando Quintero, the SETRAVI secretary during Ebrard's administration who was in charge of the expansion of Metrobus Lines 2, 3 and 4, several of these ideas come to the forefront. Quintero told me first about the costs of adopting the newest technologies and how that signifies having autonomy from private interests. In the following quote, he discussed how the Mexico City officials refused to use buses with old technology and instead required that Metrobus buy vehicles that would meet the most recent EURO international emissions standards:

With the Line 1 the bus manufactures wanted to sell us Euro III technology when the rest of the world was already on Euro IV and Euro V. Euro IV was already on the market and we declined to buy Euro III. We had to bring fuel all the way from Tijuana, more than two thousand kilometers away for three years because we did not have fuel that was

compatible with Euro IV engines here. Now we have it here. We did not allow manufacturers to sell us their leftovers. Our mayor had a vision of the future and said no, we are not going to be a decade behind, even though it was expensive. In lines 3 and 4 we have Euro IV and V and in line 4 we have electric and hybrid buses. Those are the only hybrid buses in Latin America. They are very expensive, each unit costs 750 thousand dollars (Interview with AQ, 12/14/2013).

In this, Quintero also makes evident some of the less known facts about a sustainable transportation project. In this case, the project required the transportation of fuel for 2000 kilometers, from the US border to Mexico City, to be able to operate buses with state-of-the-art engines that could not function with Mexico's at the time obsolete diesel fuel. Quintero links this to a greater commitment to sustainable mobility that PRD mayors have embraced:

Movilidad is a project from the left. It began with Lopez Obrador that built Line 1 and now we are on Line 5 and we will get to 10 lines. We also made three zero-emission corridors with trolleybuses, 10 corridors with high capacity buses with Euro technology. We got rid of 36,000 VW beetle taxis. And along with this Ecobici and the bike lanes. We have created a culture not only at the city level but also at the delegacion level. This is a project from the left that you cannot find anywhere else. They are beginning to copy us but they are very far behind. In Estado de Mexico they have Mexibus but they use Euro III technology because they went for the cheap units. They had a lot problems and it took them three years to complete the project. They are behind us, they use Euro III and we use Euro IV (Interview with AQ, 12/14/2013).

Quintero here makes an argument that I often heard from other officials: that the work that Mexico City is doing is fundamentally different not only from what other cities and states are doing, but that it also represents a break with the Mexico City political culture of the federally and PRI-controlled administrations. In this case, adopting a newer technology, although expensive and at times unsustainable (bringing fuel from 2000km away), represents not only autonomy but also long term vision and a determination to be at the forefront of infrastructure innovation, whereas neighboring Estado de Mexico, the PRI's stronghold, continues to buy obsolete equipment. Making these efforts visible not only to Mexico City's residents, but for the rest of the country and the world is also very important.

This evidences demonstrates a form of infrastructure fetishism that privileges the BRT over other interventions that could be more profound, but less visible because they are not branded nor have the trademark of Metrobus. In a conversation with Xavier Treviño director of ITDP Mexico this fetishism became very clear to me. We met in his office in the trendy Condesa neighborhood to discuss the BRT as a technology. During the interview he showed me a computer rendering that he described as "sexy". The rendering shows BRTs circulating along Avenida Reforma,

What people don't know is that BRTs can also have doors on the right side, which makes it very dynamic. You can put them everywhere. Here, we think the BRT should run from the Buenavista commuter train station to Polanco. You might not have enough demand for big buses like in Insurgentes, but you can use small ones. So, this route is still in the

works but I think it will look very nice. It will have a huge impact in media throughout the country. Imagine, Avenida Reforma with a BRT, let me show a render that I have here, its very sexy (Interview with XT, 3/5/2013)

I interpret this as an example of how BRT as a technology shapes the options for policy innovation, for instance, in Avenida Reforma there is not really the necessity to bring a BRT line, you could, potentially, make a dedicated lane for the existing RTP buses, which are less than 10 years old and of high quality. Why, then, the idea that upgrades need to come in the form of a BRT? One explanation could be that given the pressure from the World Bank and Embarq to have an integrated system, anything that is not part of Metrobus is considered a step on a different direction and away from that goal. While these considerations are important, I argue that the insistence on the BRTs has to do with showing visible changes that can signal deeper transformations, although, in reality, it is easier to build a new BRT line than to make legal and institutional changes to improve existing service.

This fetishism with the new was also evident in the interview with Armando Quintero when he was explaining the successful renovation of the city's old trolleybus system, which was retooled as Corredor Cero Emisiones (Zero Emissions Corrido). In this case the public-owned Sistemas Transportes Electricos (STE) company retooled two of its eight remaining trolleybus routes. These trolleys also meet several of the guidelines for a BRT project: a dedicated lane on the road, established stops, and the driver does not charge fare, although there is no pre-pay system nor a four-minute frequency. In other words, they have many of the characteristics of Metrobus service, and being electric, they could also be considered highly sustainable (hence Zero Emissions). However, this system has received very little coverage despite being a successful upgrading and re-purposing of existing infrastructure and a public system. As Salvador Medina (Medina 2013) points out, the STE has the potential to increase its quality and relevance with just a few changes, at a much lower cost than new BRT lanes.

As some of the quotes included here show, there are some interesting paradoxes between the official discourse of the comprehensive reform that would result from the adoption of *política de movilidad* and the exceptionality of Metrobus as a piecemeal project. The BRT, thus, is at the same time a project that is successful because its goals are quantifiable in the narrow terms of GHG emissions reduction and a project that is used to signify the possibility of a larger urban reform that would address many of the existing institutional and political constraints for effective environmental governance.

### **3.5. The afterlife of Proyecto Metrobus and the Arrival of a New Actor, the Expert-citizen**

The collaboration between CTS and the city government for Metrobus Línea 1 established CTS as a *de facto* authority on BRTs in México. CTS quickly became an indispensable ally for the Mexico City government as it attempted to continue the success of L1 and developed the plans for the subsequent BRT lines. CTS also increased its profile thanks to the consolidation of the WRI and the creation of their sustainable transport branch, EMBARQ. EMBARQ came to institutionalize the original project that Lee Schipper coordinated, creating an international network of offices that promote sustainable transportation, heavily focused on BRT in Brazil, Peru, South Africa, China, India and Mexico. Embarq received funding mainly from the Shell and Volvo Foundations and its



Mexico office expanded at a rapid pace, opening several departments for research, promotion of sustainable transport and consulting.

Around the time that the Metrobus project was being completed another international organization arrived to the country, ITDP. ITDP is a NGO created in New York in the 1990s focused on the promotion of the bicycle as a mode of transportation. ITDP, along with other environmental organizations in Mexico, received substantial funding from the Hewlett Foundation, who for several years was focused on promoting sustainable transportation. ITDP and EMBARQ offices are often located in the same countries, as they tend to focus on megacities in the Global South. While there is no formal division of labor between these organizations, informally, as staff from both organizations told me, these organizations divided their area of influence in Mexico: EMBARQ focuses on BRT while ITDP focuses on non-motorized transportation (bicycle, pedestrian) and other sustainable urban policies such as parking management.

By 2006 both the Shell and Hewlett foundations had achieved a strong presence in the city thanks to the fact that they fund the two largest sustainable urbanism NGOs in the country (and the world). The interest of Shell and Hewlett was not isolated, in fact, Mexico City had become a hotspot of transport innovation given the prevalence of its environmental crises and the particular challenges of its sector (Garthwaite 2013). Thanks to this, local organizations became recipients of funds that come from the Inter American Development Bank, the British Embassy, the Dutch Embassy, the UN Habitat. This money helped fund a series of activities aimed at creating projects and spaces for a variety of non-state actors to discuss and generate proposals for sustainable transportation.

### *3.5.1. Consensus, Immediacy and Civil Society*

The influx of funds from international philanthropy--exemplified by Shell, the Hewlett Foundation and the British Embassy--was instrumental in generating synergies among different civil society actors and between these and the city government. Their involvement helped in the construction of *movilidad* as a socio-economic right that can be mobilized in a broad spectrum of claims for policy reforms.

The understanding of *movilidad* as a broad socio-economic right is evident in the work of a local NGO, El Poder del Consumidor (Consumer Power, EPC). EPC is an NGO that focuses on promoting consumer rights and responsible and sustainable consumption. The NGO is funded by Alejandro Calvillo, a former director of air quality campaigns for Greenpeace Mexico. I spoke to Gerardo Moncada, head of efficient transport campaigns for EPC and asked him about the connection between consumer rights and sustainability. For EPC, he told me, the link between these two issues is access to quality transport services, "First, because it is your right as a consumer to have safe and adequate transportation, and second, because quality transportation will foster more sustainable travel habits" (Interview with GM 10/12/2013). Moncada described EPC as an organization that focuses on educating the general citizenry as its main goal. EPC collaborates with other NGOs with more technical capacity such as CTS and ITDP but keeps a different focus. Whereas these other organizations have public officials as their main audience, EPC focuses on making information such as detailed reports on government spending on transportation available to all citizens, who can use this information to articulate demands and claims to local governments.

Movilidad in their work is equated with economic rights before anything else and so the way in which claims around it can be made are linked to financial and administrative transparency.

EPC's case is particularly interesting because it shows how the rise of climate change has led to important transformation on the dynamics of local NGOs and the priorities of the city. During Calvillo's time at Greenpeace the organization promoted sustainable transportation as early as 1995, when they proposed a transportation corridor akin to Curitiba's system for Avenida Insurgentes, a proposal for which they received technical assistance from the (Jaime) Lerner Institute. At that moment the government told Greenpeace that such proposal was not feasible, "a locura" (madness) in Moncada's words. This contrasts with the more recent context in which the support of the global philanthropy for this same idea allowed reforms to have more traction. For EPC, support from Hewlett meant that Moncada and Calvillo could return to a topic that, while no longer the core focus of their organization, was a popular topic around which civil society had recently assembled. For other organizations, such as CEIBA (later CTS), it meant transforming itself from a broadly-defined environmental organization to a sustainable transportation NGO.

Scientists and think tanks have also felt the need to adjust their goals and strategies to be better in tune with the growing industry of climate change aid. Alejandro Villegas, a former Hewlett Foundation Mexico officer, who was in charge of funding these organizations put it bluntly,

I lived through it when I was in direct contact with environmentalists. What I saw is that when they realized that the new thing was climate change they all went after climate change and forgot about air quality. Organizations, experts, they abandoned other topics. This tells you something about the perception and the appeal of climate change. In this sense, the actors are the same in the environmentalist world, but now the focus on a new topic, climate change (Interview with AV, 12/17/2013).

What Villegas candidly told me, from his vantage point as a former officer of a large foundation, is that philanthropy money had radically shaped environmental NGO agendas in Mexico.

### *3.5.2. Drawing the Visible Limits of Política de Movilidad*

In a conversation with Mariana Orozco, then director of public policy at ITDP, I was able to understand how these organizations conceive of their role as citizens and non-state actors who can influence policymakers and set agendas.

Despite its large international presence and professionalization of its staff, ITDP, defines itself as a citizen organization. As such, it seeks to make links between different non-state actors, translating between technical knowledge and lay citizen claims and articulating a coherent discourse to influence policy agendas (*incidencia*). In her words,

We not only educate, but also facilitate a dialogue between all these actors, who often resist speaking to each other. Citizens disqualify city officials, city officials dismiss academics, academics don't trust business leaders, and so on. As a society we don't really know how to work together. So, for us is very important to find ways to make things happen. We don't care about your particular needs, we care about the city, and if

everybody in that table cares about the city then we all have the same needs. So, we try to facilitate these kinds of dialogues (Interview with MO, 2/12/2013).

One such project is *Ciudadanos con Vision 2010*, a document that was produced after a series of meetings and consensus building exercises between different NGOs and civil society groups such as CTS, ITDP, Bicitekas and El Poder del Consumidor. The variety of actors that came together in these exercises and the process by which the proposals were developed are illustrative of the role and form that civil society has taken in the processes of defining this policy space. *Ciudadanos con Vision* was a project sponsored by the Hewlett Foundation that had the intention of complementing the more technically-oriented work of its recipients (ITDP, CTS), with a social and community engagement component (Interview with AV, 12/17/2013). The project sought to give social legitimacy to the technical recommendations made by ITDP and CTS and that would set the core parameters of what constitutes proper sustainable mobility infrastructure and thus set the visible boundaries of *política de movilidad* as a policy space.

I interviewed Nadjeli Babinet, a staff member from *Colaboración Civica*, a local NGO that provides support and facilitates consensus building exercises. Babinet was the project leader for *Ciudadanos con Visión* and told me about the details of the process, including its objectives and challenges. The project consisted of “dialogos multi-actor” exercises in which various actors would discuss their vision for transportation improvements in the metropolitan area. As Nadjeli told me, these exercises were opportunities to have a wide variety of viewpoints sitting in one table. For instance, this was a rare opportunity to have *transportistas* in conversation with bicycle activists and experts (Interview with NB, 4/29/2013). The final document that was produced after the exercises was heavily influenced by ITDP and CTS’s main concerns and was focused on making recommendations along three main areas of intervention: quality transport, land use and transport connection, and non-motorized mobility. More importantly, the document defines *movilidad* by borrowing from international best practices, equating *movilidad* interventions with rights-expanding projects that make cities more livable and *human*. At its core, this new definition of *movilidad* incorporates qualitative dimensions of a trip, such as safety, comfort and convenience. In doing so it re-defines the purpose of public investment and creates a new hierarchy of “city users” with pedestrians at the top and car drivers at the bottom, all this, couched in a language of sustainability, competitiveness, transparency, equity and citizen participation.

These kinds of exercises have become the bread and butter of *movilidad* policymaking but remain limited in terms of the actors that get to participate and the topics that are discussed. What *Ciudadanos con Vision*, as other as subsequent exercises show is that in what relates to *Política de Movilidad*, a handful of experts have taken the role of civil society and have been able to exert influence among local policymakers. They are also capable of legitimizing controversial projects. *Ciudadanos con Vision* is illustrative of a way of understanding *política de movilidad* as a set of pre-identified solutions, where adversarial politics should be avoided and instead actors should focus on agreeing on the need to implement them.

### **3.6. Conclusion**

By tracing the assemblage of the Metrobus project and its aftermath, this chapter sheds light on the different dynamics that shape the planning and execution of sustainable mobility projects in Mexico

City. The challenges to the implementation of the BRT faced by the city officials were sorted by articulation of technical expertise, discourses of transparency and financial feasibility and funding sources that gave them the necessary autonomy and legitimacy in the negotiation process with *transportistas*. The route taken by Mexico City's officials, however, did not follow what the World Bank and CTS had prescribed. Lopez Obrador and Sheimbaum, as other officials that came after them, considered that the best practices have to be made compatible with the PRD political agenda and governance project. In the case of Metrobus this meant that city would protect some of the old political privileges negotiated in prior administrations in order to able to define the BRT as a democratizing project. But at the same time, the city created a new institution, the Metrobus as an independent *organo descentralizado* to position it outside of the bureaucratic structure of the city while also instituting mechanism for regulation and financial accountability.

Metrobus also brought a new kind of legitimacy to environmental policy. By re-scaling interventions and introducing quantifiable measurements, the BRT was able to circumvent the challenges of air quality management at a metropolitan level, which have been very limited in their success. Whereas a comprehensive air quality agenda required coordination between multiple institutions, regulatory agencies and government levels, the BRT is a much smaller endeavor that can be implemented in a few months and expanded incrementally. Ultimately, by combining the legitimacy of a state-of-the-art transportation system with a discourse of inclusion and quantifiable success, the city set the parameters of how política de movilidad would be defined in the following months and years.

The success of Proyecto Metrobus highlights the increasingly influential role of development and philanthropy institutions in the creation of environmental and urban sustainability agendas. In this case, institutions such as the World Bank and Hewlett Foundation shaped the agendas of local civil society groups along their particular interests (climate change and transportation reform). This had the effect of strengthening the power of some organizations to influence policy, but also set the stage for technically-oriented NGOs CTS-Embarq and ITDP to take up the role of civil society in consensus seeking exercises.

In sum, the BRT was a watershed moment in the city's transportation planning. It created a unique vision of how reforms can bring political autonomy and democracy. It showed that these reforms need collaboration between experts, politicians, old interest groups and civil society. However, it also narrowed the solutions to a set of best practices and the planning processes to the inclusion of only a handful of actors who participate in the decision over pre-determined solutions. Furthermore, Proyecto Metrobus set a precedent for a set of logics that in the following chapters I analyze through the metaphor of immediacy. These are manifested first, in the need to implement fast projects in the form of best practices, which are executed by ad-hoc agencies that bypass bureaucratic obstacles (infrastructures of immediacy). Second, highly visible interventions act as stand-ins that demonstrate to citizens, first hand, that sustainable urbanism makes sense and is possible in the city. And third, the use of technical expertise and consensus-based processes legitimizes projects but foreclose meaningful debates on how to design a green and sustainable city (lack of mediated debates).

## Chapter 4. Ecobici: From Citizen Claim to Globally Visible Interventions

“This zone (central districts), concentrates at least 40% of the city’s daily trips for work and at least another 10 or 15% of other trips, like shopping and going to school. So, that’s where you put transportation systems, like Metrobus and Ecobici. This is where people come to work and where they do business, in other words, this is where the wealth of the city is generated. So we want this area to have better mobility. This does not mean that other areas of the city don’t need it too, but we have to attend to our priorities and in this Ecobici is particularly important. This also has to do with a re-positioning the bicycle, culturally speaking...”

*I. de la Lanza, Ecobici Director, 2014.*

### 4.1. Introduction

In the months following the completion of the Metrobus Project, a group of NGOs and civil society groups, helped by the arrival of a progressive mayor, embarked on an ambitious project to implement bicycle infrastructure in the city. The success of Metrobus had brought a great deal of attention to Mexico City and international institutions, as well as local experts, were in an advantageous position propose experimenting with more transportation policy innovations. At the same time, the process of planning the BRT had signaled that transportation policy would have to be co-produced between the city government and non-state actors which had given civil society groups a sense that they had the ear of policymakers. These efforts resulted in the creation of Estrategia de Movilidad en Bicicleta (EMB), the agency in charge of the planning, implementing and managing bicycle infrastructure in the city. EMBs most important and successful project is Ecobici, the city’s bikeshare system. Ecobici today is the largest system in the Americas with over six thousand bicycles and over 400 stations. Ecobici generates 30k trips every day, and since its inauguration in 2010, has moved over 32 million users (Ecobici).

Behind this so-called revolution lies a significant effort to re-signify bicycle transportation, long associated with the urban poor, as a central element of a new and aspirational and green and civic-minded lifestyle. Responding to the need to convince a skeptic public that green urban solutions are possible, experts, activists and city officials have taken a clear path: to implement a bikeshare system in highly visible locations in central districts along the city’s most important economic hubs. This hubs are the Avenida Reforma and Avenida Insurgentes corridors, which house most of the tertiary sector activity and Mexico City’s “global” functions (Parnreiter 2002). Meanwhile, bicycle-related investment has ignored low-income areas of the city where data has shown that, despite the lack of proper infrastructure, residents use bicycle for transportation at a higher rate.

In this chapter I further analyze of the development of política de movilidad as a distinct policy space by tracing the evolution of Estrategia de Movilidad en Bicicleta (EMB) and its flagship project, the bikeshare system, Ecobici. I draw on the concept of immediacy to show how city officials, NGOS and transportation experts selectively deployed a bikeshare system in central districts of the city and transformed bicycle policy from a citizen demand for inclusive transportation to a technocratic intervention to improve accessibility of central districts and position the bicycle as a “cool” mode of transportation.

The chapter contributes to the main argument of the dissertation in the following ways. First, it argues that sustainable mobility became a flagship project for progressive PRD officials given its perceived capacity to bring local, national and international visibility to their work as innovative politicians. Moreover, the need to produce innovative projects in a short period of time consolidated the role of NGOs and experts that could produce such results as indispensable policymaking actors. Second, it shows how pilot projects are used to enroll publics into a technocratic vision of a sustainable city produced by planners and experts. To demonstrate that this vision is feasible and ‘makes sense’, experts embarked in the project of re-signifying the bicycle, from a mode of transportation for the poor in the periphery, to an aspirational mode of transportation for middle class professional working and living in central districts. Lastly, the chapter argues that sustainable mobility projects, in their goal of producing a new public for green transportation systems, are reinforcing existing and generating patterns of infrastructure inequality and spatial difference.

#### **4.2 The Mexican Cycling Revolution?**

The rapid expansion of the bikeshare system has caught local and international attention and Ecobici’s success and the city’s “bike-friendliness” is increasingly profiled in broad interest publications across the globe. For instance, as early as 2010 the UK newspaper *The Guardian* profiled Mexico City’s bicycle infrastructure in article titled “Cycling Lessons from Mexico City” that opened with the line: “The Mexican capital is a surprisingly bike-friendly city, but are the British nice enough to follow its lead on our roads?” (Wainwright 2010). The author described how Mexico City’s geography makes the city prime for the use of the bicycle and called attention to the fact that Mexico City was outpacing the United Kingdom in embracing the bicycle. More recently, the BBC (Reyes 2012) and *The Guardian* again (Mead 2015), have covered Mexico City’s “cycling Revolution”, while *Forbes* (Flannery 2017) listed the bikeshare system as proof that Mexico City was becoming more and more like New York City, in an article that discussed the fact that *The New York Times* had named this city the #1 travel destination for 2016.

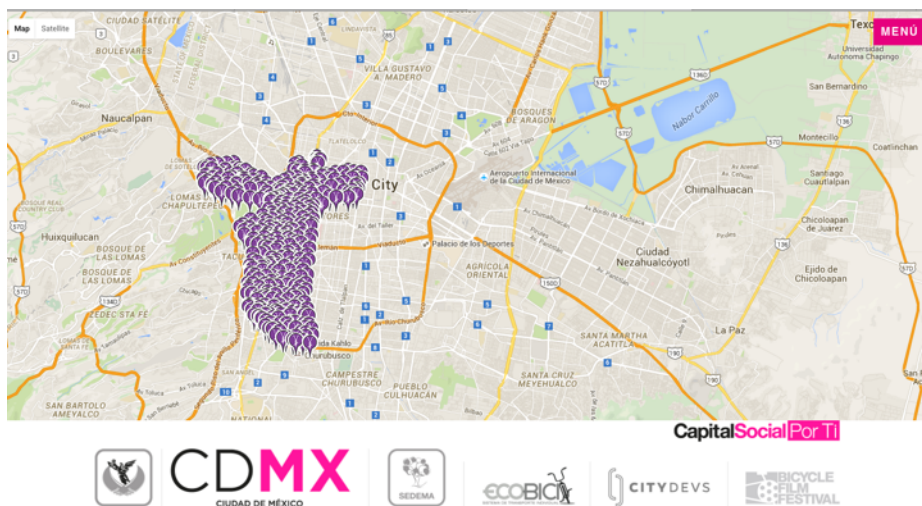
Figure 4.1. Cycling lessons from Mexico City



The fact is that Mexico City’s bikeshare system, called Ecobici, has been very successful by several measures: it is the largest system of its kind in the Americas, with six thousand bicycles and over 400 stations. The system generates 30,000 trips every day, and since its inauguration in 2010, has served over 32 million passengers (SMA website). The fast implementation of Ecobici has been complemented with a slow-growing network of bike lanes and a comprehensive campaign from the city and NGOs to promote the bicycle as a feasible and desirable alternative to car driving. This campaign includes the closing of Avenida Reforma to car traffic every Sunday, massive group rides every month, but also the mapping of “cycling friendly” businesses and bike shops, among other initiatives.

Ecobici, along with the BRT system Metrobus and other investments in sustainable infrastructure have mainly been directed at a two of the city’s most important economic hubs, the Avenida Reforma and Avenida Insurgentes corridors. These corridors are located in central districts that house most of the tertiary sector activity and Mexico City’s “global city” functions such as financial services, international trade, media and tourism (Parnreiter 2002; Aguilar and Méndez 2006; Aguilar, Ward, and Smith 2003). For instance, the map in Figure 2, taken from the City’s Secretary of Environment website, points the location of all the Ecobici stations in the city, clearly showing the clustering of this system in the central west districts of Cuahutemoc, Miguel Hidalgo, Benito Juárez and Coyocán.

Figure 4.2. Map of Bicycle stations (Source: Secretaria de Medio Ambiente)



The rapid expansion of the bikeshare system and the attention that locals and foreigners give to this system seem to point to the fact that, indeed, urban cycling is picking up fast and easily in the city. In light of this, one might be prone to ask, why didn't Mexico City residents and planners think of introducing the bicycle as a mode of transportation before?

As it turns out, many Mexico City residents have been riding bicycles as their main mode of transportation for a long time. However, these bicycle riders have not been clustered in the districts where the new infrastructure has developed and also, these riders have a different profile from those using Ecobici along Avenida Reforma or in Condesa or Polanco.

### 4.3. Bicycle and Poverty: Persistent Imaginaries and Failed Activism

For decades, ideas around the bicycle as a mode of transportation in Mexico City have been defined by powerful imaginaries built around one assumption: the bicycle is a vehicle for the poor. As a practice that takes place in plain view, most people have a sense of who uses the bicycle in the city: its either a poor worker with a low-skills profession that uses the bicycle to transport tools for and selling goods (for instance, a gardener or plumber or somebody that sells cheap food in the street) or poor families that uses the bicycle as a passenger, or multi-passenger, vehicle to conduct their daily errands (Figure 4.3). These imaginaries have been continuously reinforced by two facts. The first has to do with historic and current patterns of spatial inequality and territorial stigmatization of the poor (Bayón and Saraví 2013; Saraví, 2008). The overall distribution of bicycle use reflects the patterns of segregation and spatial differentiation between social classes. For example, the following map (Figure 4.4) shows trips made by bicycle as percentage of total trips for the whole city. The eastern districts of Iztapalapa, Tlahuac and Gustavo A. Madero, shown in darker colors, are the districts where the highest percentage of the trips are done using this mode of transportation,



at around 5%. These districts are also some of the densest and poorest districts of the city, which have also historically been most underserved in terms of transportation infrastructure, access to open space, security, cultural amenities and access to water (Schteingart and Boltvinik 1997; Schteingart 2001; Ward 1998).

Figure 4.3. Pedal-powered transportation in the Iztapalapa District (Photo by the Author)

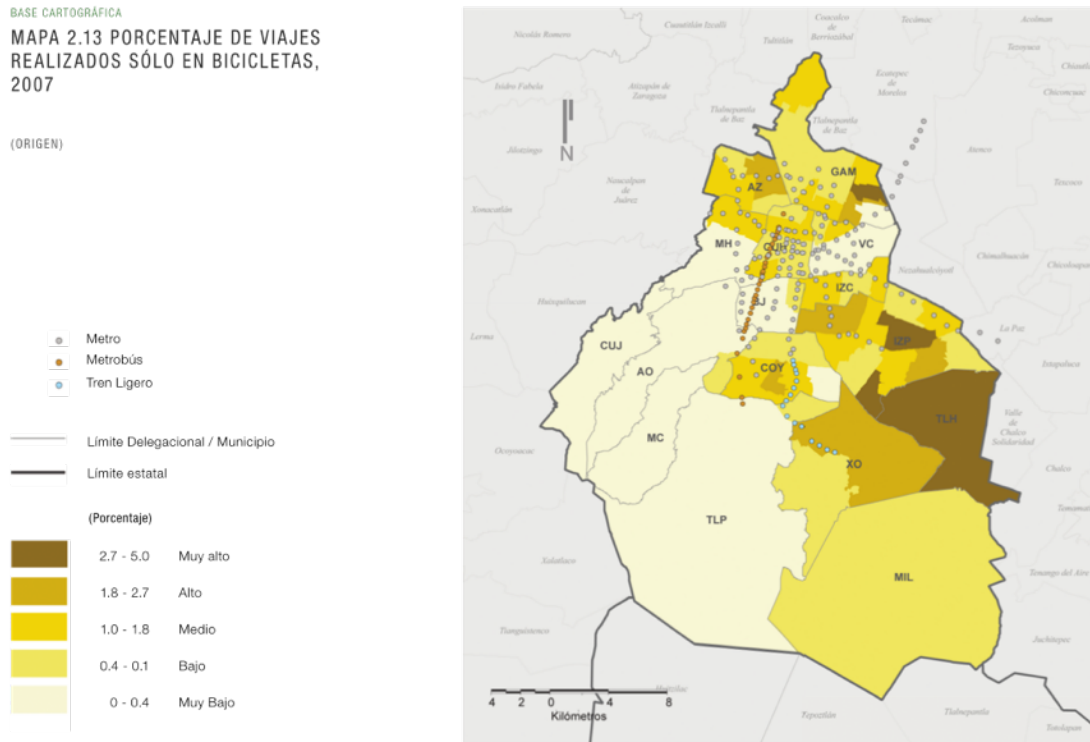


The second pertains to the patterns of infrastructural investment in the city. Since the 1970s, Mexico city's officials have favored investment in transportation automobile infrastructure over other forms of transportation (Rodríguez and Navarro 1999; Benítez Navarro 2005; Delgado 1998). Recent figures show that 70% of the transportation budget is allocated to cars in the form of road, tunnel and bridge construction and maintenance, while traveling by car only accounts for 30% of the total total trips in the metropolitan area (CDHDF, 2013). Meanwhile, since the late 1980s the city has reduced its participation on the provision of mass transit, which is now mostly provided by private semi-regulated services under poor safety and comfort conditions (CDHDF, 2013). Investment on bicycle infrastructure was also non-existent in an approach to transportation that privileged automobility through de-facto subsidies in the form of infrastructural investment. These patterns of investment and disinvestment work to render the automobile not only an aspirational purchase for middle classes but in fact, the only option for residents who seek alternatives to low quality, inefficient and dangerous transportation. Moreover, these real life conditions also reinforce stigmas of non-motorized transportation as a mode of transportation that only those that cannot afford to own a car would choose to use.

#### 4.3.1 Failed Activism

Since the 1980s, an environmentalist movement made up of a wide range of civil society organizations has mobilized and made demands to find solutions to the environmental crisis: focusing on more traditional issues of conservation, deforestation and air quality (Legorreta and Flores 1989; Durand Smith et al. 2011). In the 1990s however, some groups began to make concrete demands regarding urban sustainability and livability issues (Gonzalez Montaña 2011; Evans 2002), and some of them focus specifically on transportation issues. One of these groups, which is central to this analysis is Bicitekas.

Figure 4.4. Percentage of trips made on bicycle, 2007.



Bicitekas (a portmanteau of bicycles and Aztecs,) is an activist group that for years has demanded improvement in the conditions for the use the bicycle as a mode of transportation in the city. Bicitekas was funded in the late 1990s by a group of young progressives in their 20s and 30s that, in their own words: “believed that it was possible to use bicycles in the city to move freely and create more humane cities” (Bicitekas website). The group came to existence in the aftermath of the democratization of Mexico City in 1998 and the rise to power of the PRD. The PRD, as discussed in the chapter 2, is a left leaning party that in its origins was closely tied to a variety of political actors and causes, most notably, several affiliated to the Movimiento Urbano Popular and student and environmental movements. Although Bicitekas was a small and young group not affiliated to any large interest group or political organization, the members where sympathetic to the PRD’s discourse of co-governing, inclusion and progressive politics and they saw this as as good opportunity to make an impact in local policymaking.

As an improvised group with no experience in other forms of mobilization, their actions were mainly focused on voicing demands and bringing attention to larger problems of environmental degradation and congestion and the rights of non-car users, without a systematic approach. As a founding member narrated to me, most of their efforts were aimed at “making noise”: “we would do what we thought at the moment were large bike rides with groups of 20 people, or we would organize “die-ins” in El Zocalo... and most people had no idea what was going on and maybe didn’t notice us. However, we had an ally in the press; in Diario Reforma, who was our friend and

would always covered our events. I think that what's important is that that's how we learned that media visibility was a key element" (Interview with AC, 11/12/2013). For several years, this group engaged in a traditional activist repertoire: critical mass style rides, naked rides, protests, die-ins, anything that would bring attention to urban cyclists and their demands.

Figure 4.5. Bicitekas protesting lack of investment with a die-in in front of Angel de la Independencia (Source: elmanubrio.blogspot.com)

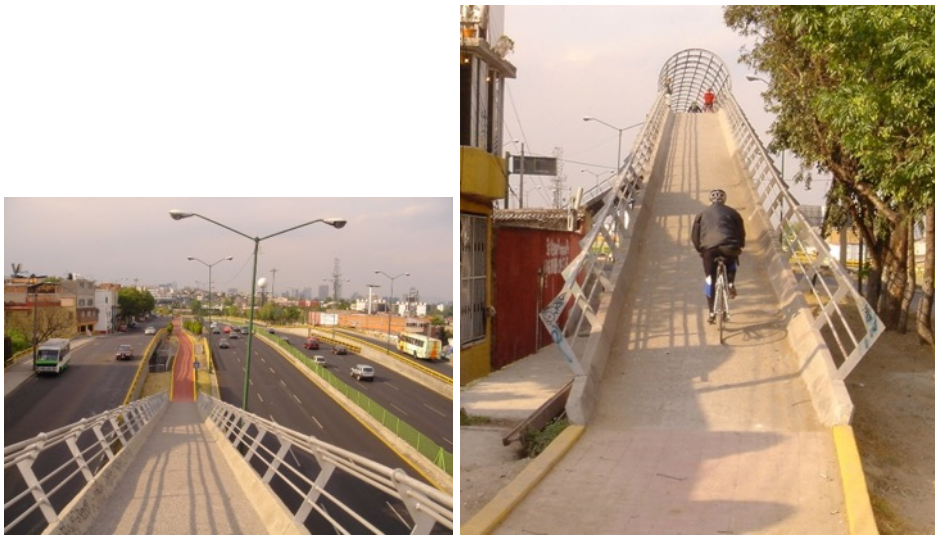


Around this time, long-seated biases against the bicycle also began to be challenged in progressive circles of young professionals and civic leaders that had been exposed to cycling culture in US and European university campuses and cities (Interviews with KL, 6/4/2013; AC, 11/12/2013; DQ 5/28/2014) and through the growing awareness of the effects of greenhouse emissions and the need to expand sustainable transportation options as a short and long term solution to health and environmental problems. Bicitekas also began to change their approach, having received funding from international organizations and training in more “professional” and programmatic forms of activism. Similarly, two of Bicitekas founding members also moved on to receive graduate degrees in policymaking and environmental management (Interviews with AC, 11/12/2013 and XT 3/5/2013). Despite this, for several years Bicitekas and other environmentalist groups, such as Greenpeace were not successful in moving forward their agendas. This, however, changed in 2006 with two important events that took place under the administration of Mayor Lopez Obrador.

The first was the the inauguration of the first line of Metrobus the city's BRT, analyzed in Chapter 3. The Metrobus project positioned sustainable mobility experts, NGOS and other civil society actors at the forefront of policymaking and at the center of the city's most exciting project. Metrobus, showed that there were alternatives to address pollution and transportation needs of the city, and that other non-state actors could also contribute to this (Interviews with AQ, 12/14/2013; EJ, 12/10/2013 and CS, 10/15/2013). The second event, which happened almost simultaneously to the construction of the BRT (between 2004 and 2005), was the construction of the the Segundo Piso of the Anillo Periferico, the city's ring road and one of its most important and congested thoroughfares. As part of the environmental impact remediation for the project, the city was required to direct funds to reforestation and public space improvements and they used the funds to construct a bike path along the decommissioned rail tracks of the old Mexico-Cuernavaca railroad.

This project, called the Ciclopista, was managed by the Environmental Secretary and did not respond to any travel demand study whatsoever. Thus, the bike path did not serve any of the most common commuting needs and was not a useful alternative to other means of transportation. The path was by all measures a recreational project, a linear park, and one with several physical design deficiencies. For example, the slopes of the overpasses were so steep that most people had to get off the bicycle and walk (Figure 4.6). Despite all its deficiencies, the bike path served as an important signal to civil society groups like Bicitekas: finally, and for the first time in history, the city was investing in bicycle infrastructure.

Figure 4.6. Ciclopista's design deficiencies (Source: reydobici.com)



Despite the positive outlook among cycling activists, being that the Ciclopista was an isolated project that had come to exist in only as a result of the expansion of car infrastructure, there was no real indication that further investments in bicycle infrastructure would happen. However, in the first years of Mayor Marcelo Ebrard's administration it became evident that things would turn out to be much different. However, if we fast forward to 2007 in the first days of the next mayor, Marcelo Ebrard, it became evident that things would turn out to be much different.

#### 4.4. The Plan Verde as a Critical Juncture

By 2007, in the first months of the administration of the incoming mayor Marcelo Ebrard (2006-2012) the role that bicycle infrastructure would play for Mexico City's government started to become clear. Marcelo Ebrard was the third elected mayor since the city's democratization in 1998. As his two predecessors, he ran under the left leaning party PRD's ticket and was expected to run for the presidency after his tenure. Ebrard was a moderate progressive largely exempt from the populist traits of his predecessor, Lopez Obrador, and more interested in policy innovations than direct confrontation with the city and country's economic and political elite. Ebrard's tenure coincided with the consolidation of an era marked by the demands of multiple forms of urban entrepreneurship (Aguilar et al. 2003; Alvarado and Davis 2003; Harvey 1989; Parnreiter 2002). On one hand, the city was well embarked in inter-city competition for global capital (Carranco 2009; 2008; Negrete 2010; Parnreiter 2005) linked to real estate development and the expansion of

tertiary sector economic activity (Coll-Hurtado and Córdoba y Ordóñez 2006). On the other, recent political transformations in Mexico created the conditions for electoral competition (Fox 2008) and mayors in Mexico, as in many cities across the globe, increasingly need to appeal to multiple publics at a local, national and international level (Davis and Reyes 2007; Pasotti 2010). Moreover, the solidification of Mexico City as the PRD's most important stronghold meant that the relationship of fiscal and political dependence between the city with non-PRD Federal administrations was also increasingly confrontational. In short, Ebrard faced pressure to construct a platform that could position him as a successful mayor and an appealing presidential candidate that was also financially feasible without depending on federal funds. Ebrard's decision to "ride the green wave" responds precisely to this challenge.

From the onset, Ebrard made clear his desire to be perceived as a cosmopolitan mayor of a global city, and in fact, was very successful at it. He was awarded the World Mayor's Prize in 2010 and led the Mayors Council on Climate Change from 2010 to 2012. Locally, he had very high levels of acceptance even increasing his popularity numbers throughout his administration which is largely attributed to his investment in transportation and infrastructure projects he pursued (Indice Politico 2012). This effort required careful mobilization of different actors and discourses and financial mechanisms that could help materialize a green agenda. To be in a better position to undertake this plan, he recruited a long time environmental movement figure, Martha Delgado, to head the Secretary of the Environment and together they put together Plan Verde, the city's first urban sustainability plan.

Martha Delgado, the founder and leader of an NGO called "Presencia Ciudadana", has been an important figure in Mexico's environmental movement since the 1990s. Delgado was not member of Ebrard's campaign team, instead, she completed her tenure as an independent legislator at the local assembly. Meanwhile, through her NGO she promoted her environmental agenda among mayoral candidates. Presencia Ciudadana presented all candidates a document titled, "La Ciudad Que Queremos", which the NGO had produced along with other environmental and citizen organizations and that summarized a series of environmental demands for the mayor and local policymakers. The document included a broad range of issues, from water management, reforestation and recycling, to transportation improvements. Notably, in the case of transportation, "La Ciudad que Queremos" incorporated one of Bicitekas most concrete demands: the creation of a bicycle lane network that would reverse some of the city's systematic infrastructural exclusions and improve those districts that rely so much on this mode of transportation, at the same time that it would provide more friendly conditions for bicycle rides at a city-wide level.

Once in office, Ebrard and Delgado took "La Ciudad que Queremos" as the basis for an innovative general sustainability plan called "Plan Verde", which was to give shape and make legible Ebrard's green aspirations. Plan Verde, Latin America's first comprehensive urban sustainability plan, modeled after PlaNYC, was framed not only as a local environmental action but as an effort embedded in a global response to climate change. Plan Verde involved a variety of issues that could impact sustainability at an urban scale but had several challenges. Notably, it called for interagency coordination but was not backed up by any legal or institutional infrastructure that could make this possible. Moreover, because the plan was not officially a law nor a proper agency, it had no budget of its own. In other words, the plan was a long list of good intentions, with no legal power and no funds that could guarantee the execution the proposed actions. Despite these

deficiencies, Plan Verde made possible for the mayor to present a series of disjointed policies and interventions as part of a comprehensive approach to public policy and environmental issues, as evidence in an essay cleverly titled “From ‘Make-Sicko’ back to Mexico City: The Greening of Mexico’s Distrito Federal” (Ebrard n.d.), in which Ebrard discusses his green legacy.

In line with the PRD’s progressive and democratic discourse, Plan Verde embraced a series of demands from environmental NGOs, mostly, with the incorporation of many of the demands summarized in “La Ciudad que Queremos” and the inclusion of other citizen participation elements such as workshops and a large voting exercise, “Consulta Verde” in which as many as 1,000,000 citizens gave their opinion on the measures that Plan Verde should adopt. One of the most important elements of the plan and the one that gets more attention is the transportation initiative (Interviews with MD, 2/11/2013; AM, 2/22/2013 and XT, 3/5/2013). The plan’s most ambitious transportation goal was the creation of a city-wide bicycle plan that was to incorporate one of Bicitekas most significant demands: a 300km bike network for the whole city (GDF-PLAN VERDE). At this point, Plan Verde was using the bike activists’ and NGOs definition of bike policy as a redistributive and environmentally sustainable project that could respond to the urgency of addressing not only long-standing local air quality problems, but also the global crisis of climate change.

But Plan Verde included another transportation project, that, as members of Ebrard’s team and transportation advisors told me, was motivated by his desire to have an innovative intervention that would stand up not only local but international scrutiny, just like the BRT had done for the prior mayor. To that end, the mayor and a team of close advisors looked abroad to what other cities had been implementing. Marcelo Ebrard and Martha Delgado set their minds on a bike-share system, which, as one of these advisors told me, Ebrard “fell in love with” when he was in Barcelona and learned of that city’s system, Bicing (Interview with XT, 3/5/2013). Those motivations notwithstanding, the mayor, at this point, was publicly and personally committed to move forward with more bicycle infrastructure.

That sustainable transportation, and specially the bicycle, was quickly embraced as policy priority was not an arbitrary decision. These kinds of “show and tell” strategies and experimentation are central to worlding strategies (Roy and Ong 2011) and a variety of efforts to gain international relevance (Greenberg, 2014; McCann, 2002; Pasotti, 2010). As Martha Delgado put it in an interview in which she explained to me the development of Plan Verde and EMB, “Ebrard is a well travelled politician, with a longstanding concern with the environment, who had researched on the most innovative sustainable transportation systems in his trips to local leaders’ meetings in Europe.” Moreover, she added: “Marcelo Ebrard is a very smart man that agreed with me that a bikeshare system was a project that could bring a lot of visibility to the administration with minimal political cost” (Interview with MD, 2/11/2013). This remark is in direct reference to the BRT system, which required of careful negotiation with confrontational transportation leaders, controversial removal of lanes for cars and the disruption of traffic patterns across central districts. In this same interview, when I asked why she thought Ebrard had been so invested in sustainable transportation, Delgado quickly responded: “Mayors love these sort of things, they like going to summits and show off what they have done in their cities... after all, they want to become Presidents eventually” (Interview with MD, 2/11/2013).

With Ebrard's commitment to the bikeshare system as a central component of his green platform EMB, the newly created bicycle agency, would have a two-fold mandate: produce infrastructure that could make cycling a feasible alternative for the general public and showcase the city as an example of innovation and effective environmental management. In practice, this would also make the original definition of the bicycle as a means to produce inclusive infrastructure and investment redistribution incompatible with the new goal of bringing global visibility to the Mayor's greening agenda.

#### **4.5. Urban cycling, Infrastructure and the Politics of Immediacy.**

Estrategia de Movilidad en Bicicleta, came to exist in 2009 when then mayor Marcelo Ebrard, who succeeded López Obrador, announced its creation of during the 2009 Copenhagen UN Climate Change Conference (Martinez 2009). EMB effectively created bicycle infrastructure as a concrete policy space and defined its functions and goals along two lines of action: a) the construction of a 300km bike network that would span across the city and, b) the implementation of a bicycle share system.

EMB's first goal responded to demands for bicycle infrastructure put forward by local activists whose demands had made it into Plan Verde. The second goal, the implementation of a bikeshare system, responded to mayor Marcelo Ebrard's green aspirations. Since its creation EMB has focused solely on its second goal, and it has been rather successful at it, as evidenced by the media coverage mentioned at the opening of this chapter. I argue that to understand why the city has effectively abandoned the redistribution goal of bicycle infrastructure is necessary to look at how the politics of immediacy shaped the evolution of EMB and how the city, in collaboration with NGOS, experts and civil society groups, embarked in the difficult project of re-signifying the bicycle and creating a new public for the bicycle and an "ideal user" in the form of urban professional bicycle commuter. The following section traces such process.

##### *4.5.1 The Infrastructure of Immediate Policy*

Transportation experts and city officials in Ebrard's administration were very conscious that bike infrastructure to be completed in a very short turnaround time. Moreover, time was of essence if they were to take advantage of the momentum created by the BRT Metrobus, which had been inaugurated just two years before, and the growing global attention that Mexico was receiving from international development and philanthropy institutions interested in sustainable transportation (Interviews with AV 12/17/2013 and XT, 3/5/2013). Evidently, the mayor also wanted to complete as many projects from Plan Verde as possible during his tenure. Ebrard's team also knew that if they wanted to enroll local citizens and the global community into their greening project they needed bicycle policy to be successful, be executed in a short period of time but also not look improvised. This meant that the city did not have the time to produce a new transportation plan, as that would imply a reform of its heavily politicized transportation agency (which largely functions as a political interphase between the city and bus owners). In response to this, the creation of EMB as an ad-hoc agency within Martha Delgado's Secretary of the Environment allowed the city to circumvent structural and politically difficult reforms.

In practice, EMB functions as an office to manage Ecobici and a handful of other bike related initiatives, such as the design of bike lanes and bicycle education and promotion, but it has never

been given the capacity to work as planning agency capable of producing comprehensive bike plan. Instead, it has functioned as a management office for piecemeal and focalized projects done in coordination with the Transportation and Public Works secretaries.

Under circumstances of urgency and demands for “fast policy” (Peck and Theodore 2010a), “turnkey”, sustainable transportation practices projects such as the bikeshare system are very appealing not to elected officials and politicians, but also to sustainable transportation activists and experts that want high quality infrastructure. Ecobici is a ready-to-use product purchased from the global media company Clear Channel Outdoor, who also operates Barcelona’s *Bicing* and several other systems in different cities across the globe. The city had paid Clear Channel Outdoor 75 million pesos (about 7 million dollars at that time) for the system’s “hardware”: bicycle, stations, etc. The remainder of the cost was covered through an agreement that allowed Clear Channel Outdoor to install billboards and sell publicity space in public areas owned by the city. The contract allowed Clear Channel Outdoor to then rent out these spaces for publicity for 10 years and pay the city a quarter million pesos per month as “contraprestación” (kickback), which, according to some reporters, was only slightly over 10% of the revenue that these spaces were generating for Clear Channel Outdoor (Contreras 2012). The agreement generated dissatisfaction among some politicians and policy experts because, although the city was acquiring a sustainable technology, the mechanism by which this system was financed was generating “visual pollution”. Nevertheless, the administration argue that the conditions of the contract are justified because they were able to acquire a bikeshare system at a very low cost (Delgado 2016).

In short, Ecobici had important key advantages for the administration. First, the use of a proven and quick to implement best-practice was appealing to different actors that wanted results with low-risk of failure and could not wait for the development of local solutions. Furthermore, as a semi-private program managed by a special agency, Ecobici bypassed slow moving bureaucracies and worked as a workaround to the demands of interagency coordination required by Plan Verde. And finally, through the setup of a new public private partnership with Clear Channel Outdoor, the city was able to purchase a proven technology without substantial upfront investment.

#### *4.5.2. Immediacy, Experience and the Temporality of Planning.*

EMB was seen as having only one chance to be successful and called on experts for help in developing the actual guidelines that would guide the work of the agency. Martha Delgado secured external funds to hire a team of academics from the National University (UNAM) and a team of designers from the Danish firm Gehl Architects (Interview with AM, 2/22/2013). Gehl and the University generated an extensive document with design guidelines that became the *de facto* plan, given that the agency lacked the legal capacity to develop binding plans. In many ways, the document was an exercise of technical rationality and over-planning. The UNAM academics included every physical aspect of the city that could shape the experience of riding bicycles, from the climatic dimensions of the city, to kinds of trees that could provide shade, to the slopes of streets and water precipitation as well as spatial analysis of the city’s socioeconomic patterns and data on daily travel patterns that showed the distribution of daily trips as well as hotspots of bicycle use, also using the EOD survey. In turn, Gehl Architects produced a concrete vision of what adequate bicycle infrastructure would look like along their world renown ideas of innovative human-scale urbanism. The designers applied their design principles to streets, sidewalks,



intersections and bicycle parking elements to inscribe a specific description of what qualified as good sustainable infrastructure.

Bicitekas, who had been demanding infrastructure for years, was not invited to collaborate in the drafting of the document and was only called to give their “opinion” once the planning documents had been prepared, in what accounted for a striking departure from the city’s pro-citizen participation discourse exhibited up to that point. Bicitekas expressed frustration by how the city had gone about producing EMB’s documents and argued that not only had they been excluded from the process, but also, that the city had unnecessarily spent hundreds of thousands of dollars to hire a firm that came to tell the same things that Bicitekas had been voicing for a long time. Areli Carreón, a Bicitekas leader, critiqued the involvement of Gehl in the following terms:

For years we had been telling them (city officials) that bicycles should circulate in the street along with traffic and not on the sidewalks with pedestrians and they always thought we were crazy... and now they spend millions of pesos to have Gehl tell them that bicycles indeed should go on the street with the rest of traffic... And now all of a sudden the city became the world’s fiercest champion of bike lanes (Interview with AC, 11/12/2013).

Gehl’s design guidelines, as expected, were of exceptional quality and would certainly make a statement that bicycle infrastructure was real concern and should be worth of attention from the general public. In that, even Bicitekas agreed. Except, they argued, that they had overlooked important contextual features that would affect and shape their feasibility. Carreón described the meeting where the design guidelines was presented as follows:

We told them (Gehl and UNAM and EMB): this is wonderful, but this will never be possible here. Where are we going to build these things?... For instance, they (Gehl’s team) said: all the bike stations and the bike lanes must go parallel to bus stops... Well, guess what? We don’t have bus stops, often we don’t have a sidewalk... And the Danish architects were listening and looking at us very silently and I am sure they were thinking: well, we never considered those things... (Interview with AC, 11/12/2013).

Despite the skepticism of local civil society and the lack of contextual expertise of the Danish team, the collaboration between EMB, UNAM and Gehl Architects was fruitful. The final document outlined the actions of EMB along four axes: The construction of bike lanes, the improvement of existing infrastructure (sidewalks, street crossings, etc.) to meet international best practices standards in order to increase safety; the construction of a bicycle share system that would be linked to an integrated mass transit system (which has not yet happened), and education of general public on bicycle and traffic safety.

EMB’s plan was delivered in the form of seven books and a DVD set that was visually appealing. The documents and packaging was done in a way that was distinct from the typical city documents. The documents took the form not of a manual for planners but a marketing tool, which in fact was distributed to official visitors, international agencies, policymakers and even the occasional graduate student doing research on bicycle infrastructure. The DVDs contained the same information of the books plus detailed cartography and geographical data on the city, a design

manual for intersections, sidewalks and other equipment, guidelines for the promotion and education on sustainable transportation, guidelines for monitoring success of the program and an urban cyclist handbook.

In this stage of the process the city, for all its pro-citizen participation discourse, sidelined activists from participating in the design of a plan that could respond to existing needs and capabilities, preferring to partner with global experts that could justify the use of a pre-selected approach. With these design manuals the EMB instituted a set of design and policy guidelines that defined, along strict and narrow definitions, what counted as adequate bicycle infrastructure. The city assumed that a project executed following these guidelines would certainly convince any skeptic that the city was serious about bicycle planning, but most importantly, that bike infrastructure would be more successful to the degree that it followed these best practices. Furthermore, with the development of the EMB documents, the agency proved to have the administrative capacity and the technical knowledge to implement infrastructure, even when the rest of the city's governance structure, which had created the demand for automobiles in the first place, would stay in place. Bicycle infrastructure projects, therefore, would have to demonstrate, by their mere existence, that a green and sustainable city were already possible and that cycling was a feasible mobility alternative that made sense. But while Gehl's designs were of high quality, it also meant that any bicycle infrastructure project would have to meet technical requirements that were not feasible in most of the city.

#### *4.5.3. Bicycle Publics*

The process of designing bicycle infrastructure was one shaped by a politics of immediacy in which there was no space for public deliberation. The design guidelines were not produced to mediate a debate between the city, designers and the general public on how to produce adequate bicycle infrastructure for the city. Instead, the city was adamant that the physical characteristics of the system would speak for themselves and expected that good design, in this case the implementation of world-class design guidelines, would convince the general public that riding bicycle was a feasible alternative in the city. Immediacy would also affect the kinds of publics that Ecobici would call into being once the system was in place.

With the development of the EMB documents, the agency proved to have the administrative capacity and the technical knowledge to implement infrastructure. What was yet to be decided, was where this costly infrastructure would be deployed. With the advice of an international sustainable transportation NGO, the implementation of the plan focused on using Ecobici to re-signify the bicycle with a new profile of bicycle users using high quality infrastructure, such as segregate bike lanes and attractive bike racks, targeting interventions in important economic and cultural nodes. The objective was clear: change the imaginaries associated to riding bicycles in the city and create a new public for the bicycle, the environment and civic-minded young professional. In the following paragraphs I show how the Institute for Transport and Development Policy (ITDP) shaped the implementation of the plan.

ITDP Latin America operations are housed in Mexico City and the organization has been involved in different efforts to promote sustainable transportation in the country. Given ITDPs focus on bicycle infrastructure, the NGO was in a prime position to offer extensive training on the operations

and planning of a bikeshare system. ITDP served as an advisor on two levels: in the larger political management of the program and on the day-to-day “technical” details of the system. In terms of the political aspects, ITDP’s advice was simple and to the point, as this NGO’s local director explained to me in an interview: “We need to make cycling associated with being “cool”, you know, aspirational, otherwise it will always be considered something that only the poor use” (Interview with XT, 3/5/2013). ITDP focused on making sure the Ecobici would be a mass success among professionals and middle class residents, who would ideally use the bicycle and other forms of transit instead of driving (Figure 4.7). Given the associations between bicycle use and urban poverty, and the poor quality of public transit, this was not going to be easy. Thus, the selection of site for the system’s initial stage that would work as “a pilot” for the public to experience and as such, it would have to be in a highly visible area that was well served by other forms of public transportation (Delgado 2016). In practice, this meant that bicycle infrastructure would only be added to areas that already enjoyed the best conditions of accessibility and infrastructure in the city.

Figure 4.7. Ecobici Users (Photo by Aaron Borrás)



The original plans for the bikeshare system negotiated by Ebrard and Clear Channel had designated the upscale neighborhood of Polanco as the first areas to be served by the system. Polanco is a wealthy neighborhood that has recently become heavily populated by high-end businesses and offices and is well served by transportation. Polanco enjoys a healthy reputation as desirable destination for what became intended new bicycle public and being that it is one the most well-known and attractive areas in the city, it seemed to Ebrard’s team as a perfect place to launch the program (Interview with XT, 3/5/2013). Moreover, as I was told, for Clear Channel, having access to publicity space in Polanco also made a lot of sense from a business standpoint. ITDP, however, looked at this differently. ITDP advised against an initial deployment in Polanco because they knew there was resistance of Polanco residents to the idea of adding of bicycles to their already congested streets and that they had expressed their concerns with the arrival of more people to their neighborhood, especially those expected to be poor (because they move on bicycles). For ITDP it was clear that Ecobici was not going arrive to Polanco, at least not right away, but also couldn’t be deployed in areas that that would reinforce its association with poverty (Interview with XT, 3/5/2013). After all, Ecobici’s first stage was to serve as a mediating device meant to make legible to the middle classes what ITDP and the city meant by sustainable urbanism and a green lifestyle.

ITDP identified other neighborhoods with similar accessibility conditions but whose residents would be more inclined to embrace and support this project: the neighboring districts of Condesa , Roma and Zona Rosa (Col. Juarez). These neighborhoods are known for their recent transformation into important centers of leisure and consumption among the bohemian and young professionals and new centers of business, tourism, consumption and leisure. Moreover, these areas are served by most of the city's transportation options, the Metro, the BRT, the Electric Trolley and the small city-owned bus service RTP, in addition to multiple semi-regulated providers. Ecobici, presumably, would come to increase the livability and accessibility of these areas which in turn, were perceived by ITDP as having much more welcoming cultural conditions for the project. And here, the assumption was that if the "cool residents" of Condesa and Roma left their car home and got on the bike, the rest of the city would follow.

EMB's priorities, thus, were re-focused around the launching of Ecobici in the aforementioned neighborhoods in 2010 and the construction of two bike lanes along Reforma Avenue. Meanwhile, the construction of the 300km network was postponed indefinitely. This approach was questioned and criticized on the grounds that it only benefits a limited number of riders and completely ignores areas in the east end of the city where most of the trips take place. Moreover, the requirements to enroll in the Ecobici included yearly subscription fee equivalent to US\$30 and having a debit card. This was seen as a prohibitive requisite for the majority of the city's population and clear indication that EMB was taking an elitist approach. The card requisite was so heavily criticized by the general public that it was eliminated less than two years after the program started and replaced with less strict requirements.

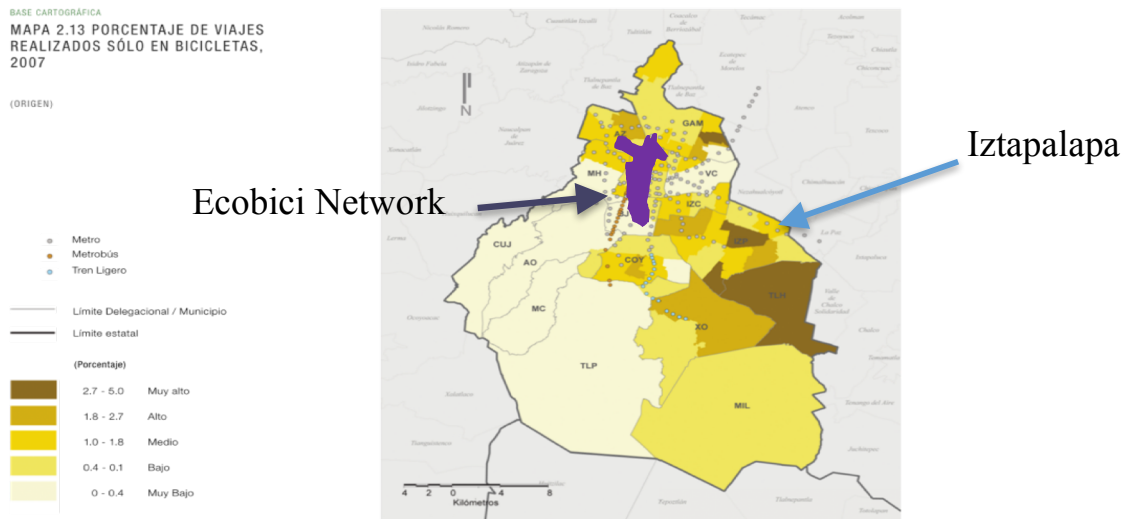
Meanwhile, the first and main critique, that the program only has focused on a handful of upper middle class neighborhoods and ignored the poor, was justified with a technical argument of increasing ridership and focusing on "last-mile" solutions that implies that the best places in the city to increase ridership are those where there are more jobs. Responding to this, Ecobici was, and continues to be, focused on the areas of the city that geographic analysis consistently show as the job "attraction poles" (Suárez and Delgado 2009; Mercado Celis and Moreno Carranco 2011) and which correspond to Centro Historico and the Insurgentes and Reforma corridors. For the city, this approach continues to be the preferred strategy to move forward. Ivan de la Lanza, director of Ecobici since the beginning of the program summarized this strategy as follows:

This is not just discourse (the strategy); it comes from a lot of planning. This zone (central districts), concentrates at least 40% of the city's daily trips for work and at least another 10 or 15% of other trips, like shopping and going to school. So, that's where you put transportation systems, like Metrobus and Ecobici. This is where people come to work and where they do business, in other words, this is where the wealth of the city is generated. So we want this area to have better mobility. This does not mean that other areas of the city don't need it too, but we have to attend to our priorities and in this Ecobici is particularly important. This also has to do with a re-positioning the bicycle, culturally speaking... for instance, if Condesa residents for the last few years have been receptive to bicycle use, why don't we take advantage of this. This is something that was not expected, even at a global scale, it was not clear that there was going to be a bicycle boom like the one we have now. Four years ago I wouldn't have thought that New York,

would also have a bikeshare system and such a strong bike culture (Interview with IDL, 10/17/2013).

As the quote shows, by bringing questions of economic development and the need to create a new bicycle public, experts and city officials rendered the bicycle plan’s original objectives incommensurable. Although the original goal was to address inequality and citizen demands with a bicycle network of extensive coverage, the immediacy and visibility demands of the plan trumped these considerations. In practice, infrastructure was to be deployed selectively, not comprehensively and thus would not target the “invisible” districts of the periphery, and instead it would be focused on increasing visibility and ridership in the city’s most important economic centers. Effectively, with this Ecobici has hailed not one single public, an undifferentiated bike rider, but multiple publics which must enjoy different infrastructures because they play a different role in creating the conditions for a green city. The spatial repercussion of this approach is evident in the Figure 4.8, which shows the distribution of Ecobici stations in relation to the hotspots of urban cycling and infrastructural deficiencies in the city.

Figure 4.8. *Uneven Green Infrastructural Geographies*



#### 4.6. Conclusion

In this chapter I showed the relationship between sustainable transportation policy and the production of urban spatial inequality. The chapter shows how, in the wake of Proyecto Metrobus’ success, the incoming mayor Marcelo Ebrard and his administration embraced sustainable transportation as a flagship policy. With this, the bicycle became embedded in the political needs and global aspirations of the city. Subsequently the planning of bicycle projects were shaped by a set of logics that had been set into place during with the Metrobus project and that I analyze as the politics of immediacy. Immediacy shaped the institutional and political landscape and the work that mobility experts, consultants and NGOs did to guarantee the success of these interventions and made these projects incommensurable with long-standing demands for inclusive bicycle planning in

the city. As I showed, the need immediate action and the bypassing of existing bureaucratic structures, the strategic placement of infrastructure projects to enroll publics around a top-down vision of green transformation and the use of best practices to or eliminating public debates around green futures ended up reinforcing class and territorial stigmas and generating more inequality.

The selective bicycle investment reinforces also points to the need of looking at the relationship between green policy and uneven development as a multi-scalar problem. This case suggest that such approach might help addresses some of the limits of the green gentrification framework (Checker, 2011), which is an important contribution that can be limited by its over attention to neighborhood displacement when taken out of its traditional research sites (North America and Europe) and is applied in contexts with different spatial, social and political dynamics (Janoschka, 2002; Ghertner, 2015; Janoschka and Sequera, 2016).

Finally, examining the infrastructures and practices that make possible the fast implementation of sustainable transportation projects sheds light on some of the most salient democratic paradoxes of greening reforms. Sustainable mobility projects have been made possible thanks to a series of privatizing (neoliberal) reforms, but these reforms are also considered to be central to a project that aims to democratize urban planning and infrastructural governance along new definitions of the public good in which sustainable lifestyles are expected to bring more social inclusion. The case of Ecobici illustrates how the strategic enrollment of publics plays a role in continuing or disrupting the current politics of green development.

## Chapter 5. Spatial Governance, Parking Management and Pilot Programs: Mobilizing a Manufactured Success.

“You have to come up with pilot programs that can put in people’s minds that things can be done. Otherwise it won’t happen, if we don’t see it working our perception of risk is very high; people think: “No, that can’t be done, that happens in Holland and other places, but not here...” So, a very important part [of the process] is to generate pilot programs. In Polanco the parking meter was a successful pilot program. It demonstrated that it’s possible, and from then on things are much easier. Now people think: “you are not talking about Copenhagen, you are talking about Polanco”, and people can say “I was there the other day and I saw it”. That’s why they are important.”

Xavier Treviño, Director of ITDP Mexico, 2013

### 5.1. Introduction

In this chapter I trace the development of a parking management program that has been framed as a Movilidad project by the city and sustainable transportation experts. The program—Ecoparq—is a public-private partnership in which private companies operate electronic parking meters to regulate on-street parking. Ecoparq has been deployed in a number of central neighborhoods that in recent years have undergone intense economic revitalization. Like EMB, discussed in the prior chapter, Ecoparq was included in *Plan Verde* and has been defined by the city as a green improvement program because it regulates car use and improves pedestrian spaces. But as I show in this chapter, beyond the “greening” qualities of the program, Ecoparq is ultimately an intervention that rationalizes the use of public space and eliminates street informality with the objective of correcting some of the most evident effects of lax enforcement of law and zoning regulation. This program has been controversial as it is the first major attempt to institute street parking regulation in the city and has faced intense opposition from residents and the general public. In rejecting the program, residents of affected neighborhoods argue that Ecoparq is nothing more than a new taxation scheme and a quick fix to more important problems of permitting and zoning infringement.

I analyze two moments in which the politics of immediacy shaped the development of Ecoparq. In a first moment, the program was framed as a quick solution to multiple streetscape governance problems, in this, the parking meter was defined as a technological innovation with the capacity to order public space and eliminate petty corruption. The project program was first implemented in the neighborhood of Polanco, an area previously identified as receptive to the program. In a second moment, months later, Polanco was showcased as a successful green and anti-corruption project as the city and sustainable transportation experts engaged in a contested process of expanding the program to the neighborhoods of Roma and Condesa.

In this chapter I argue that the strategies used by the city and ITDP to promote Ecoparq make evident that *política de movilidad* is intimately linked to larger efforts to transform the social and spatial dynamics of central neighborhoods. In this case, the project is made possible by the mobilization of the manufactured success of a pilot program that worked as a demonstration of what the city would look like if governance reforms were enacted. As the quote that opens this

chapter confirms, the mobilization of Polanco as a success was aimed at gathering enough support for the program before a special voting exercise, a *consulta ciudadana* in which residents of the Roma and Condesa decided on whether to implement the program in their neighborhoods. These demonstrations upend the temporality of planning by presenting urban futures as a reality that can be experienced first-hand in the present moment. Once constructed, these infrastructures no longer need to be justified in technical terms and instead, are expected to just make sense to the average resident. By creating this form of immediate experience, pilot programs suspend the possibility of imagining and debating other possible solutions to the problems of sidewalk and street congestion.

In this chapter I make a second argument about the effect of the programs. Despite the democratic and greening rhetoric that constitutes the *política de movilidad* field, like the other projects I discussed in previous chapters, the parking program allows for two forms of displacement: the displacement of undesired users from streets and sidewalks and of citizens from participating in the design and planning of the city of the future.

## **5.2. Streetscape Governance: Greening Improvements, Spatial Practices, Informality and Illegality**

Ecoparq has been defined by city officials and transportation experts as a *política de movilidad* project aimed at reducing car congestion and improving conditions for pedestrians while reducing street informality and petty corruption. In fact, Ecoparq intervenes in a complex set of streetscape and urban development governance arrangements making two diverging agendas compatible: one made of progressive and rights expanding claims and a second consisting in punitive policies aimed at economic development and urban entrepreneurialism. The first agenda is comprised of citizen demands for improving the quality of sidewalks and pedestrian infrastructure in general and is framed in terms of the right to mobility, inclusion and redistribution of public investment in infrastructure. The second one seeks to clean up sidewalks from informal activity and is tied to the privatization of space and securitization of central districts to improve commercial activity and real estate development in areas currently undergoing intense revitalization.

### *5.2.1 Streetscapes and Pedestrian Rights*

Mexico City's sidewalks are notorious for failing to meet a minimum standard of safety and functionality. Often they have an irregular layout, contain a variety of obstacles to pedestrians, are excessively narrow or are non-existent. On a typical journey a pedestrian will find sidewalks that are uneven, cracked and deformed by the growth of trees with abrupt elevation changes, have gaps or lack ramps or other accommodations for the needs of the elderly, children and the disabled. Crossing large avenues requires either moving with extreme care as one evades fast moving automobiles, or the use of scarce pedestrian bridges that require one to climb stairs equivalent to going up two or three stories in a building. Added to this, is it common to find that sidewalks are "invaded" by businesses such as stores and restaurants that use sidewalk space to showcase goods, set up dining tables or display publicity material. Sidewalks are also often blocked by automobiles that overflow garages and are often parked on the sidewalk (Figure 5.1).



Figure 5.1. Sidewalk invasion. Colonia Roma.



In recent years, the city has made small efforts to improve conditions for pedestrians, such as enforcing a sidewalk construction code, making ramps on corners mandatory and by increasing the number streets with visible zebra crossings. Following through on these measures, however, has been left to the each local delegación's authority and there continues to be a lack of a city-wide quality standard for sidewalks.

According to activists and NGOS, neglecting pedestrian needs while investing in projects favorable to automobiles reflects a view on the part of the city officials that pedestrians are second class citizens whose rights come after those of the automobile. In response to this, in recent years civil society organizations have been articulating claims around pedestrian rights and the right to mobility. Several of these organizations have formed a network called *Liga Peatonal* (Pedestrian League) and actively participate in congresses and other events aimed at promoting their agenda in Mexico City and the rest of the country. Their work focuses on a variety of issues: from road safety, sidewalk and pedestrian spaces improvement, universal accessibility, pedestrian vulnerability among other related issues. Their claims are framed in terms of the right to the city, and specifically, around the rights of pedestrians over those of automobile drivers and the right to universal and inclusive sidewalks and streets. This is illustrated in “Carta de los Derechos del Peatón” (or the “Declaration of Pedestrian Rights”). A manifesto of sorts prepared by *Liga Peatonal*. This document defines pedestrians as the most important user of the city and pedestrian rights as an indispensable component of an inclusive, democratic city (Figure 5.2). The Declaration is illustrative of the claims civil society actors have been articulating around the need to guarantee the universal right of circulation to all pedestrians, improve the material conditions of sidewalks and with this, undo infrastructural biases toward the automobile.

Figure 5.2. Declaration of Pedestrian Rights, a document prepared by Liga Peatonal



### 5.2.2. Streetscapes and Informality

Mexico City's streetscapes are also shaped by a series of spatial practices that are linked to diverse forms of economic activity. Since the 1980s the city has seen an increase of informal and semi-formal economy (Cross and Camacho 1996; Peña 1999; Portes and Roberts 2005). Today, an important percentage of Mexico City's population depends on the sale of goods, services and food that takes place on sidewalks, parks and other public spaces. Often, large streets, plazas and areas surrounding transportation hubs are crowded with "ambulantes" or street vendors that construct makeshift stalls from which they offer electronics, clothing, books, housewares, fresh and prepared food, among other things. These activities often extend beyond these areas and into the sidewalks of many neighborhoods, where one can find food stands, flower vendors, but also car repair shops, shoe repair and other similar business operating with little or no regulation, often blocking sidewalks and streets (Figure 5.3).

Figure 5.3. Ambulantes in Mexico City's Centro Histórico



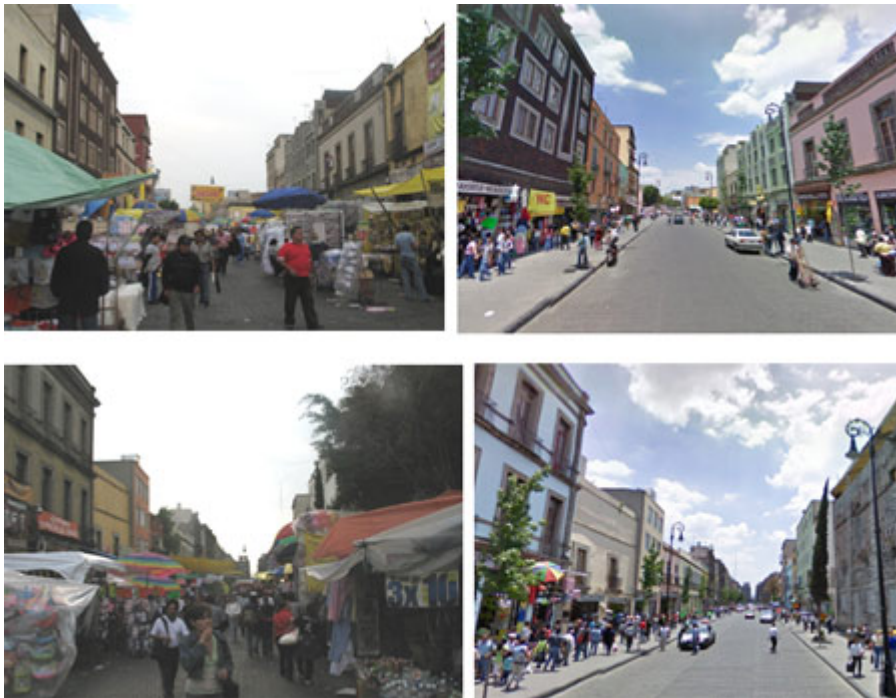
Street vending is a long-standing practice in the city. Some argue that this responds to traditional forms of commerce that existed prior to the arrival of the Spanish and are embedded in Mexican ancestral culture (Fernández 2013). The size and economic importance of the informal economy has generated conditions under which sellers organize to better deal with law enforcement, pay bribes and assert pressure on local officials, a situation that has allowed *ambulante* to grow as an important area of the economy and *ambulantes* to emerge as a notable political interest group (Cossa 2009). This, in turn has generated conflicts where authorities are unable to exert control over the use of sidewalks and streets of certain neighborhoods which are completely occupied by vendors at the expense of pedestrians, drivers and other users of the city.

To some extent, the city's leniency to these practices and arrangements evidences that left-leaning government is cognizant of the important role that the informal economy plays in dampening the effects of neoliberal economic policy and its devastating effects in Mexico's working class. However, in certain areas of the city informal activities and street vendors pose important obstacles for the plans of revitalization and re-investment efforts that the city has procured since the 2000s, mainly, in central areas of the city.

Centro Historico is a case in point. Authors such have noted that the securitization of Centro Historico has focused on the removal of certain activities perceived to be unappealing to real estate investment. These efforts, as Davis and Reyes argue, illustrate the "Giuliani Factor" (Davis and Reyes 2007), by which they make reference to the hiring of NYC former-mayor to assist city officials in creating controversial a security and policing strategy around zero-tolerance and centralized surveillance. Mostly, these efforts involved the removal of informal activity along specific corridors and districts (Davis and Reyes 2007; Becker and Müller 2013). These endeavors required mobilizing political resources to break with the long-standing arrangements between informal vendor organizations and the city, but also and most visibly, often relied on police to

conduct forceful removal of activities deemed dangerous, or otherwise illegal. In central areas, these removals have opened up spaces for improvements that like pedestrian commercial corridors (Figure 5.4). Scholars have framed this as part of large processes of entrepreneurial urban governance (Harvey 1989, Smith 2002), and the processes of displacement and resistance that result from this (Cossa 2009).

Figure 5.4. Centro Histórico Landscape before and After removal of informal vendors. Source: Café de las Ciudades.



In sum, in efforts to improve streetscapes in Mexico we find two clashing projects intersecting: progressive civil society groups seeking to expand rights and inclusion *and* governance transformations aimed at creating conditions for targeted capital reinvestment, dependent on the privatization of space. The street parking management program Ecoparq, I argue, makes these contradictory projects compatible.

### **5.3. Booming Districts, Parking Shortage and Informal Management**

Parking shortage and street and sidewalk congestion is a problem across the city, however, it has been portrayed as critical in several important and booming economic clusters along the corridors of Insurgentes and Reforma and in the Southern districts of Coyoacan and Tlalpan (in the background chapter I discuss these economic clusters). In recent years these districts been transformed from residential neighborhoods to economic centers where residences chaotically co-exist with commercial and office spaces. These transformations have happened in disorderly fashion due in great part to lax enforcement of zoning and urban development plans, which has allowed market forces to shape urban development without proper management of externalities (Tamayo 2007, Interview with RR, 8/5/2014). Investment in real estate and businesses in these areas often happens in illegal and extra-legal spaces. For instance, large scale zoning infringement

allows for the construction of office and residential buildings that exceed the height limits stipulated to the plan. Along with these, other common practices are associated to corruption, for example, the authorization of business licenses for bars and restaurants in buildings located in blocks zoned as residential.

Unregulated growth generates a series of critical externalities such as rising rents and affordable housing shortage (Tamayo 2007; Celis, n.d.), as business owners and investors price out longtime residents, but also put pressures on existing infrastructure and public space (Interview with RR, 8/5/2014). As these neighborhoods have transitioned into economic poles that receive thousands of visitors a day that arrive for work, leisure or other activities, the road and parking capacity has been largely surpassed. A common situation is that an old residential building with parking spaces for only one or two vehicles is repurposed as an office space with a dozen employees, or a restaurant or boutique. Facing a lack of parking, employees and patrons of these business look for curb-side parking in neighboring streets, which are often already saturated with the vehicles of the residents of the area. These conditions have spawned a series of informal practices to control, manage and profit from scarce space.

Against this backdrop a particular kind of informal worker has appeared. The so-called “*franelero*” (rag guy) or “*viene viene*” (keep going), manages street parking<sup>5</sup>. *Franeleros* do not have any legal authority to manage space, however, they work with the tacit approval of residents and property owners, with which they have created a symbiotic relationship. In practice, a *franelero* will approach a visitor to the area and offer parking assistance to watch over vehicles (security) and sometimes even wash the car in exchange for a fee, which is negotiated on the spot. Once the driver agrees to a fee and is allowed to park on that block, *franeleros* will remove obstacles that they place on the street, such as metal cans, wood boxes or other kinds of makeshift barricades and assist the driver in parking. Fees are usually collected up front, and it is well known that refusing to pay will likely result in harassment and often times in a vandalized vehicle. The situation is slightly different for daily visitors who arrange weekly fees and for local residents and property owners, who often develop long-term relationships that may include having the *franeleros* perform other services, such as sweeping and cleaning home or storefronts or conducting car maintenance and small repairs (Figure 5.5).

*Franeleros*, like many other informal workers on Mexico City’s streets, are routinely harassed by law enforcement and other groups who demand payment in exchange for freedom to operate (Becker and Müller 2013). Similar to street vendors, these workers also form larger groups, through which they negotiate with or pay “*derecho de piso*” (pay to work) bribes to local authorities and maintain control over valuable city blocks and neighborhoods. In short, control and management of streetscapes in booming mixed used districts is a complex issue where informality, gray practices and illegality coexist thanks to a parking shortage and a symbiotic relationship between residents, property owners, local authorities and daily users.

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<sup>5</sup> The common names come from the way in which these workers use rags to assist drivers parking in tight spaces or on sidewalks.

Figure 5.5. *Franelero* and roadblock (source. Nexos.com)



## 5.4. Ecoparq and the Politics of Immediacy

### 5.4.1. Framing Ecoparq as Best Practice

The Autoridad del Espacio Público (AEP), a city agency was created with the purpose of managing public space upgrading projects. In this section I show how AEP in collaboration with ITDP have framed Ecoparq as best practice.

Under Ecoparq, private companies invest in and operate electronic parking meters with on areas determined by the city. The private companies keep 70% of the revenue collected by the meters and give the remaining 30% to AEP, who then uses the income to fund public space improvements in the same areas where the fees are collected. Ecoparq is managed by AEP, which, like Metrobus, is an organo desconcentrado. IN this case, AEP is overseen by SEDUVI (Secretaría de Desarrollo Urbano y Vivienda) the Secretary of Housing and Urban Development, but in practice operates in parallel to the secretary's plans and actions. Although the agency is called "Autoridad", the agency does not have planning or legal authority or enforcement power and but rather acts only as a permit management agency for public-private partnerships and project management office for small scale public space interventions such as pocket parks and pedestrian improvements. AEP has been central to the improvement works that are accompanying real-estate led economic revitalization in Centro Historico and other central areas of the city. Situating Ecoparq in this this agency as a PPP facilitates its targeted implementation, as it does not require large investment from the city government nor the approval of development plans as other SEDUVI projects do.

AEP's defines Ecoparq as a program with three functions: 1) as a parking and traffic congestion control measure and thus a sustainable transportation project; and 2) as a mechanism for re-ordering and improving public space and thus a program that improves pedestrian rights; and 3) as a democratic governance tool that allows for citizen participation in urban improvement plans.

Ecoparq's goals—ordering public space and regulating car use—are shared by sustainable transportation experts and several other civil society groups that have been demanding improvements to pedestrian-oriented infrastructure. ITDP, however, has been the most important non-state proponent of the program and has provided extensive support to AEP in defining the meaning of and promoting this policy. ITDP staff argues that this program is very important because it is a first step into creating the conditions for more complex car use reduction policies, such as congestion charging schemes analogous to those in London and Singapore, which they see as more effective than the existing “Hoy no circula” program (discussed in Chapter 2). For ITDP Ecoparq makes a lot of sense, it is, after all, a system that helps quantify and monetize the externalities of driving, which is something that, as they told me in interviews, they consider the city has never done effectively. Thus, for ITDP, any action that makes drivers more aware of the costs of driving should be seen as positive. One ITDP staff member, for instance describes the situation as follows: “parking should not be free because streets and sidewalks are public, it's not the city's responsibility to have a space always available for free for you to store your private property” (Interview with EB 3/1/13).<sup>6</sup>

ITDP also makes a point of stressing other less debatable benefits of parking management: “liberating” streets and emancipating pedestrians from the tyranny of both cars and informality. These arguments are often illustrated in documents and presentations by images of San Francisco and New York City's parklets, miniparks and expanded sidewalks. These images represent best practices that are promoted across the globe as examples of a new wave of modernization and livability that as Melissa Checker (2007) argues, are also projects that are deeply embedded in processes of green gentrification. Nevertheless, as best practices, they rely on decontextualization that allows them to travel (McCann and Ward 2011) and as visual rhetorical devices are very effective in showing a desired result while leaving out more problematic consequences.

AEP has also embraced these pro-public space arguments and has defined the program as a concrete intervention on the existing governance space with a rather clear message: That electronic parking meters will end the tyranny of *franeleros* and minimize opportunities for low level corruption. Parking meters, allegedly, will bring transparency and order to the management of parking and streets and create the conditions for mixed use urbanism. In an interview with the head of Ecoparq inside AEP he described the program as a tool that can break a “vicious cycle”, where illegal activity and physical chaos has created the conditions for citizen mistrust in the city's capacity to order public space. He told me,

[People are suspicious of Ecoparq] and I find this understandable, as the city has operated with lax code enforcement and lack of transparency for many years. But the electronic parking meter is, in fact, an indispensable tool to reverse this trend...with the parking meter, we have the capacity to monitor use and revenue in real time and share this information with the residents (Interview with EB 3/1/13).

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<sup>6</sup> Interestingly this is an argument strikingly similar to an argument made by former Bogotá mayor Peñaloza in the film *Urbanized I* which he uses the analogy of having closet space for your wardrobe, which should be “your responsibility not the city. (Urbanized).

As this quote illustrates AEP staff argue that the parking meter will solve many of the problems that are prevalent due to lack of political will such as double-lane parking or parking on the sidewalks, which should be penalized by law enforcement officers. This city official told me that police forces are easily bribed and people use this to their advantage, including the *franeleros*. In this case, the city official defined the electronic parking meter as an incorruptible actor that can intervene and transform daily practices of corruption in which state and non-state actors are complicit.

AEP also defines the parking meter's virtues as going beyond eliminating the possibility of law enforcement corruption. Ecoparq's program contemplates a citizen monitoring committee for each neighborhood where the program operates. These committees are supposed to coordinate with AEP and the private operators to guarantee transparency of finances, customer satisfaction and participate in decisions about neighborhood improvements done with the collected revenue.

The director of the program described this as "the possibility of going from a "vicious cycle" to a "virtuous cycle", in which mistrust is transformed into good governance, "better state-citizen relations and improved public spaces" (Interview with EB 3/1/13). This last argument contrasts starkly with the fact that blocking streets and sidewalks is already prohibited by existing laws and diligent action of Policia de Transito, the branch of local police that is in charge of enforcing traffic codes, could be just as effective as the parking meter in removing informal activity and enforce parking time limits. When I asked him about this, he replied that traditional (non-electronic) parking meters and other forms of enforcement using human agents would never give you the capacity to monitor revenue and effectiveness in real time. Furthermore, because they relied on people collecting fares and later reporting revenue, they always had possibility of mishandling. Clearly, as my interviewee asserts, the electronic meter is defined by AEP as a technological device that makes possible important reforms (live monitoring and transparency), and thus, as an actor that can also bring about greater levels of transparency and create new structures for state-citizen engagement.

For ITDP packaging and marketing Ecoparq as something that breaks with the old way of doing things is important. Just as the AEP representative wanted to break the vicious cycle, ITPD proposed to eliminate mistrust in the government creating an image of institutional autonomy and signify projects as a break from business as usual. ITDP's Andrés Sañudo explained this very clearly,

We already had the name "Eco" from Ecobici and we wanted to build on that. The idea is to show that this is a new way of doing things and we need to build a brand. Metrobus was the first one that proved that things can be different. Ecobici has been very successful and we wanted to capitalize on this and thus chose the term Ecoparq. The idea is that people see that these are projects that go together. And, just as Metrobus is an independent agency, the idea is to have Ecoparq become an independent agency as well. Think of this as a "Parking Authority" (said in English) of sorts...(Interview with AS, 3/13/2013).

AEP and ITDP insist on the parking meter program as a best practice tool to quickly transform not only the physical landscape of the city but also the governance (state-citizen relations) of streetscapes. Ecoparq, however, is strikingly disjointed from existing plans and legislation. Most



critically, the parking meters address street congestion by charging cars, but the source of congestion, which lays at the enforcement of zoning regulation, remains unchanged. As many detractors of the program argue (and I will discuss in a subsequent section of this chapter), car traffic has increased because of uncoordinated changes in land use and zoning infringement and Ecoparq is only a superficial solution to those issues.

#### *5.4.2. Demonstrating Ecoparq's Success*

Once Ecoparq was constructed as a best practice AEP and ITDP worked closely to make sure that the program was successful. This turned out to be a two-stage process that involved, first, the careful selection of the site of the program's pilot phase, and second, the use of this first phase as a demonstration that a streetscape management program in the city was feasible in efforts to expand Ecoparq in multiple neighborhoods. In this section I trace how this process unfolded. As I will show Ecoparq's first stage in Polanco was manufactured as a success that could later be used to convince other neighborhoods that new forms of streetscape governance are possible. However, the conditions under which Polanco was implemented were not present in other parts of the city, such as in Roma and Condesa, which are socially heterogeneous and have a history of social mobilization. I argue that the pilot program in Polanco in fact disrupted temporality of planning as it was mobilized to demonstrate that a reform had already happened and that any resident could visit and experience its effects.

ITDP did not participate in the initial contracting and permitting stage, which took place without a public bidding process. In fact, the contracts, as an ITDP staff member told me, were extremely generous to the private companies in terms of financial and legal obligations. Given that they could not intervene in the legal framework, ITDP focused on the effective implementation of the program, after all, Ecoparq represents an experiment that can create the conditions for more comprehensive car use management. Early on, ITDP identified the neighborhoods of Roma-Condesa as an obvious target area: just like in the EMB (Ecobici) case, these neighborhoods met two important criteria: existing data shows that they have some of the highest rates of inbound traffic associated with commuters and commerce (INEGI 2007) and also they are considered to be some of the most desirable and "cool" neighborhoods.

However, ITDP quickly learned that residents of the area were ready to oppose the project. ITDP took this seriously, as Colonia Roma has a long tradition of successful mobilization and citizen organizing that dates to the 1985 earthquake and its aftermath, when residents organized to manage the immediate humanitarian crisis and later to avoid relocation as part of the government's plans to re-develop the area (Leal Martínez 2014). In light of this, ITDP quickly reconsidered their approach and instead recommended Polanco, the affluent neighborhood that had originally opposed Ecobici (as discussed in the prior chapter), as an ideal area to implement the first stage (pilot) of the program.

ITDP collaborated with AEP with a preliminary feasibility study in the area, surveying the opinion of Polanco residents and producing detailed technical information on traffic and parking patterns in the zone. Since this kind of information was non-existent, ITDP had to generate its own data, using its own staff to conduct traffic surveys, parking space inventories, maps and related. ITDP's team also prepared models to calculate congestion reduction, emissions reduction and potential revenue

with different parking rates. The NGO also produced a document that included the baseline data for traffic and parking use, as well as guidelines for the implementation of parking systems and information on how to educate the general public on the benefits of the system. This document was used by the city but also became part of ITDP's handbooks and best practice manuals, which are distributed to decision makers and made available online<sup>7</sup>. Through this study, ITDP saw that Polanco residents would be receptive and supportive of the project, and in some cases, were actively demanding some form of parking management in the zone. In fact, Polanco residents have long voiced concerns related to the economic and social transformation of their neighborhood in recent years.

As expected, Polanco's Ecoparq program was inaugurated in January 2012 without major incidents from residents and property owners. However, the project did encounter some resistance from informal workers which evidenced the challenges of undoing existing arrangements between *franeleros* and local authorities. In days preceding the inauguration of the program, local police began to remove *franeleros* who had continued to operate while the parking meters were being installed. On the first days of the program, the GDF deployed a group of policewomen to educate the public on the new program and request that they pay the meter or risk a MX\$300 fine and the possible immobilization of their vehicle with a tire boot that requires the payment of an additional MX\$180 (US\$25) to be removed. This was done, partly, because there were groups of *franeleros* that refused to leave Polanco streets and confronted the authorities by pasting "out of service" stamps on the meters to give the impression that they were not operational. This situation only lasted a brief period as the city clamped down on *franeleros* and the system was up and running as expected within a few weeks.

#### 5.4.3. *Scaling Up*

A second and more complicated phase of Ecoparq consisted in creating favorable conditions for the expansion of the program in Roma and Condesa. Ecoparq's pilot received a great deal of media coverage and in Roma and Condesa opposition began building up. In addition to the social heterogeneity of the area and the history of mobilization (discussed in chapter 2), Roma and Condesa posed another key challenge for AEP: Polanco is located in the delegación Miguel Hidalgo, while Roma and Condesa are part of delegación Cuahutemoc. For Alejandro Fernández, the PRD delegado of Cuahutemoc the parking meters represented an opportunity to differentiate himself from other delegados by alluding to his party's commitment to democratic co-governing<sup>8</sup>. Fernandez, who had been sworn in just a few months earlier in 2012, had promised during his campaign that the decision to bring the parking meter program to his delegación would be subject to a popular vote and not be an imposition from the central government.

Popular vote exercises, called *consultas ciudadanas* in Mexico City, have become an important legitimacy instrument for PRD mayors and represent the complex ways in which this left-leaning party has dealt with its democratization promise, which can be traced back to its links to the

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<sup>7</sup> (<http://mexico.itdp.org/libreria/>).

<sup>8</sup> Cuauhtémoc is one of the PRDs strongholds. This delegación includes several of the central neighborhoods, including Centro Historio, Roma, Condesa, Zona Rosa, etc.. PRD's local headquarters are also located in Colonia Roma.

Movimiento Urbano Popular (Bruhn 2012; Cadena-Roa and López Leyva 2013).<sup>9</sup> *Consulta públicas* are voting exercises that are not legally binding and are not required by local legislation. In practice, consultas have been used by the PRD to incorporate citizens in highly controversial projects and consequential decisions<sup>10</sup>. For a large voting exercise that is voluntary, consultas are costly and rely on the local electoral institute for monitoring and execution, which has sparked concern on the viability and fairness of the processes. Moreover, since consultas are not legally binding, the local government is not required to follow their results. In practice, though, they have been used as last resort for highly controversial issues, as they represent a political gamble, however, when the results are as expected, they produce a great deal of legitimacy.

The announcement of a consulta for Ecoparq came to expose the growing social divisions of the neighborhood and polarized residents along diverging ideas about how to make a sustainable and green city, what public space is and what constitutes inclusion and fairness. The definition of Ecoparq as a green project was exposed as a debatable assertion and the claims about its capacity to eliminate corruption was undermined by the perception that the program was an imposition that would only benefit politicians and their business partners. Ecoparq was packaged as innovative policymaking that represented the only feasible way to transform Roma and Condesa's streetscapes. By branding it as part of a larger effort to green the city, supporting the project was supposed to also signify certain sensibility towards environmental sustainability, in addition to a commitment to end corruption.

#### *5.5. Leading up to the consulta and opposition to Ecoparq*

Roma residents were well informed and ready to oppose to program. I interviewed several of them and heard multiple views, most of which expressed legitimate concerns and doubts about the benefits of Ecoparq. Many residents had experienced how their neighborhoods had become populated with new businesses and residential buildings and had a positive opinion of economic development. However, they were very critical of the disorderly way the government had allowed this transformation to happen. In their eyes, regulating parking was a superficial action that did not solve the problem of permitting, zoning infringement and lack of infrastructure. Often enough, they alluded to abandoned plans or proposals to develop new partial development plans for the zone that could eventually achieve more harmonious interactions between old and new activities in the zone. The question of whether the project was in fact a green project was almost irrelevant and, for them, Ecoparq was nothing more than a new taxation scheme that the mayor had dealt under the table and that would disproportionately affect lower income households. After all, the city had implemented a parking meter system in neighboring Colonia Juarez (Zona Rosa) since the 1990s and that program was never linked to urban sustainability efforts.

In the weeks leading to the consulta, the neighborhood was the site of intense campaigning both for and against the program. Residents opposing the program put signs and banners in their homes and public spaces and engaged in multiple demonstrations and protests. Meanwhile, the delegación

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<sup>9</sup> Short note on PRD's democratic promises in DF, link to MUP, etc...

<sup>10</sup> Most notably, Mayor Lopez Obrador made use of these exercises to ask for the citizens' opinion on the construction of the Periferico's second level (discussed in prior chapters) which would require substantial public funds and a major disruption of traffic patterns along some of the most important thoroughways in the city.

government and its allies also distributed flyers and posters and organized town hall-style meetings and other informational events. Several of the opposing residents formed a group called “Asociación en Defensa de Roma-Condesa-Hipódromo”. Asociación took to the streets in several occasions, distributing information against the program and on social media outlets but also pursued legal recourses against the program and preemptively prepared for the cancellation of the consulta or a fraudulent execution of such. Their main claim was that the neighborhoods’ public space had to be defended from forced privatization, which was often expressed in phrases such as “El espacio público se defiende, no se vende” or “defend, don’t sell public space”

I followed the group in several of their demonstrations and interviewed some of their core members. It was evident that the majority of the Asociación members were long-time residents of the area, who were not necessarily poor, as they had automobiles, but did not appear to be as well-off as the people that had recently moved to upscale condominium and apartment buildings in the area. While I did not collect economic data, some of these differences were easy to identify in conversations, for instance, I spoke to older adults that lived in small apartments with their spouse and children and a number of adults in their late 30 and 40s that shared their house elder parents and extended family. Claims to be residents “de toda la vida” (all their life) are usually ways in which they coded and differentiated themselves from newcomers. In the demonstration, it was also common to find a great number of teenagers and seniors (again, a different profile than newcomers).

It was quickly clear to me that the main concern for these neighbors was not being able to park in the street. AEP had announced that each household would receive one parking permit that would allow them to park without paying the meters, which is a common practice in other cities. Protesters argued that one permit would not be enough, especially in the very common cases of extended families living in the same address. They also argued that they would be unable to afford the parking rates and also spoke with great concern of the fact that their relatives and friends would no longer come to visit them because it would represent an added cost. In short, parking regulation would not only impact their financial situation but also their social and family life. But their concerns were also beyond the immediate changes to their lifestyles; as long time residents they also felt threatened by the way recent mayors were “selling out” of the city with the privatization of urban spaces.

For longtime Roma and Condesa residents, Ecoparq was problematic in at least three ways. First, because it was not perceived as a solution to the real roots of congestion in the zone. One neighbor put it in simple terms:

They are trying to get rid of congestion but at the same time make everything that possible to create a commercial pole: cars and congestion are not the problem, they are only the consequences of the real problem... and the real problem is land uses, that you have more people coming into the neighborhood than what the area can take, you are targeting the symptoms not the real malady (Interview with E, 1/10/2016).

Moreover, neighbors pointed out that the real problem was zoning infringement and corruption:

If you really wanted to do something to improve this area you should get rid of the restaurants. Check if they have their permits and licenses in order. They are required by

law to have one off-street parking space per table. Where are all those spaces? That's corruption! They don't even have a document that shows how the city is going to improve traffic flow. Where are their studies? They say that study doesn't exist! That's not the right way to fix things... (Interview with E, 1/10/2016).

Here, this neighbor pointed out that the *delagación* was complacent with law infringement because business owners bribe officials and inspectors in order to be allowed to operate without meeting city codes and regulations.

Second, because, despite all the claims to transparency, there was a lack of clarity on the process by which contracts were awarded and confusion as to what exactly was the role of AEP. For example, MA, another neighbor told me:

Who is the company that owns the meters? Nobody knows, they haven't seen their faces, but supposedly it is the prior mayor [Ebrard]. Now they have this Authority [AEP] to mediate between citizens and the city because they don't want to talk to us... Everything they say that we will get for safety improvements is not true! This is a big swindle. We could not read the actual contracts with the companies because they are protected as trade secrets (Interview with MA, 1/12/2013).

While another neighbor described this in a rather frustrated tone,

Then they told us: The company is called *Operadora de Estacionamientos Ecoparq*, and we asked them, what is that? A company? A brand? A program? AEP is acting on behalf of Ecoparq the program and the company that owns the meters at the same time... So what exactly is its legal function? Why does it receive private money and public money? They never gave us an answer and to this day, we still don't know what companies will run the meters here (Interview with R, 1/12/2013).

And third, residents argued that it was not just a program that impacted the economy or informal practices but also reflected the GDF's disregard for democratic participation and social inclusion. Again, as MA explained,

People feel they have been dispossessed in the economic and political sense. The Authority acts as if they owned this neighborhood...they should ask us first...(Interview with MA, 1/12/2013).

Another member of *Asociación*, E, pointed to the social dimension and hinted at the perception of the city governments in recent transformations,

This parking meters are going to generate a lot of problems because they impact multi-dimensional issues. They cut across a thousand different topics...“this is an issue that has to do directly with the social fabric of the city, because in Roma Condesa you have all kinds of social classes and with this program they seek to divide us. Why do they want to do so? Because they think: “If you can afford to be here you should leave!”. I think this is a rather perverse plan...(Interview. with E, 1/10/2016).

On a Saturday afternoon in December 2012, a few weeks before the voting exercise, I joined a group of *Asociación* members as they were staging a demonstration in a major intersection of Avenida Insurgentes. The demonstration was not aimed at the Delegado or the government, instead it was organized as a public awareness effort. *Asociación* set up a table with some information on the sidewalk and organized two teams with megaphones and large banners with statements voicing opposition to the program. At the table, group leaders were collecting contact information from supporters, discussing future actions and what progress had been made on the “amparo” (a legal protective mechanism) that was aimed at cancelling the project on legal grounds. There were also two teams of *Asociación* members that for the length of a red-light, when traffic stopped, would stand in front of car drivers and quickly deploy the banner while one person used the megaphone to invite people to oppose the project and be aware of what they argued was the imminent privatization of public space. The demonstration went on for several hours despite being physically demanding activity.

Figure 5.6. Marching against Ecoparc



This event was intended to counter what *Asociación* perceived as an unfair and misleading campaign on the part of city officials. *Asociación* claimed that the city and its allies had been presenting untruthful information, disregarded any attempt to consider alternative solutions for parking shortage and were trying to force the program onto them. The “information meetings”, one neighbor told me,

were more like sales pitches or extortions than information meetings. Basically, they told us: “This is how your neighborhood is going to look [after the program].... Look, if you want to keep dealing with the problem of *franeleros* then vote ‘No’ and you will have them around for another 30 years...” In other words, they told us, we won’t enforce the law if you don’t agree to our new taxing scheme... (Interview with E, 1/10/2016).

I witnessed several events in which city officials presented the program to the citizens that made evident the degree of mistrust and polarization of arguments. One of these was a town-hall style meeting that took place on a weeknight in which ITDP, who had been involved in an educational campaign about the benefits of the parking meter, provided support (Figure 5.7). In the meeting, the Delegado Alejandro Fernandez, AEP officials and ITDP staff members presented arguments for the program in front of a group of about 80 neighbors.

Figure 5.7. ITDP’s Brochure “Myths about Parking Meters”

**MITOS** sobre los parquímetros

**Mito 1** ¿El estacionamiento en la vía pública debe ser gratuito?  
**FALSO** Cobrar por estacionarse no sólo contribuye a mejorar los lugares disponibles, sino que reduce el tráfico. Está demostrado que los parquímetros son una buena herramienta para fomentar una rotación constante.

**Mito 2** ¿Los sistemas de parquímetros recaudan ingresos para los municipios?  
**FALSO** Los recursos generados por el sistema de parquímetros pueden utilizarse para el mejoramiento del espacio público en la ciudad, como de banquetas y carriles para bicicletas. Así ya ocurre en ciudades como San Luis Potosí.

**Mito 3** ¿Cobrar por estacionarse perjudica las ventas del comercio?  
**FALSO** Muchos cajones son ocupados por gente que trabaja en dichas áreas durante todo el día. Esto afecta la disponibilidad de estacionamiento para los clientes de los comercios. Los parquímetros evitan el estacionamiento por largos periodos de tiempo, generando mayor rotación en esos lugares.

**Mito 4** ¿Un parquímtero discrimina a los sectores de menos recursos?  
**FALSO** La mayor parte de los hogares de escasos recursos no tiene automóvil. La instalación de sistemas de parquímetros no los afecta mayormente, pero sí es capaz de beneficiarlos, ya que los recursos generados pueden ser ocupados para mejorar el transporte y el espacio público.

**Mito 5** ¿Los parquímetros sólo funcionan en países desarrollados?  
**FALSO** En México ya hay casos exitosos de implementación de sistemas de parquímetros. Desde 2008, en San Luis Potosí han generado más de \$90 millones de pesos, que en gran parte se han reinvertido en el mejoramiento del espacio público.

**Mito 6** ¿Los parquímetros generan mayor inseguridad?  
**FALSO** Los parquímetros no sólo establecen reglas claras de cobro y administración, sino que incluyen un registro con los datos de sus funcionarios, además de que conllevan la implementación de un sistema de atención a usuarios. Los autos que utilizan parquímetros son monitoreados constantemente por inspectores a cargo de asegurar que los espacios se estén utilizando correctamente.

**Mito 7** No hay suficientes cajones de estacionamiento. ¿Debemos crear más?  
**FALSO** Generar más lugares no resolvería el problema. Pero establecer un sistema de parquímetros ayuda a gestionar los cajones de estacionamiento disponibles generando un uso eficiente de los mismos, sin que se requiera proveer cajones extra.

**Mito 8** ¿Los parquímetros producen una caída en el valor de las propiedades?  
**FALSO** Todo lo contrario. Dado los efectos positivos que tiene la regulación del espacio de estacionamiento en la calidad de vida, el valor de las propiedades tiende a subir.

[www.mexico.itdp.org](http://www.mexico.itdp.org) **ITDP**

AEP presented Polanco as evidence that the program works and claimed that ITDP, as a civil society group, could vouch for its effectiveness and good intentions. As proof of the success, they argued that parking demand for parking in Polanco had been reduced from 120% to 60% of the available spaces. Moreover, that Polanco’s neighbors were already involved in planning what to do with the collected revenues. To make this point stronger, they projected PowerPoint slides that showed the drastic transformation of Polanco streets and sidewalks. The images showed a street before and after Ecoparq and the differences were striking. In one image streets were crowded with cars and *franeleros* and on the other one the same street was almost empty, clean, and orderly. The images, however, did not give details as to what time and day of the week the images had been taken. However, their stronger argument came in the form of a recommendation that Roma and

Condesa residents visited Polanco to experience the transformation on their own or at least one could ask a friend or relative that had gone to Polanco recently. As the opening quote of this chapter evidences, this was echoed in my own interviews with ITDP directors.

The audience, however, remained divided. Some applauded the intervention in Polanco and asked for more details about the kinds of projects that could be funded with the revenue. But a considerable number of residents was upset with the fact that they would have to pay for something that used to be free and were especially concerned with how many resident parking permits would be issued. Others posed practical questions such as the hours of operation and even looked at the potential difficulties of the program. For example, one person argued that if the meters were to be effective they would have to work till 2 in the morning, when bars in the area close, but then would residents have to wake up at midnight to feed the meter? There were other important concerns, for instance, as with the mechanics of the consulta and how votes would be counted and what would happen if some sections voted yes and other sections voted no. How would that affect the effectiveness of the program? Others argued that this kind of situation would spark conflict among residents and fracture understandings between different “generations” (which was also code for social classes).

The event quickly escalated into an argumentative exchange between residents and the city officials. Different neighbors expressed opposite understandings on what was public about public space, while others accused the delegación of being corrupt. Another resident demanded that the experts explained how the meters could be part of política de movilidad if they had nothing to do with the metro or the buses. A neighbor said that he commuted by bicycle to work but that now, with the program, would actually begin to drive again because at work there was free parking. The meeting ended after 90 minutes and the groups appeared more polarized than at the beginning.

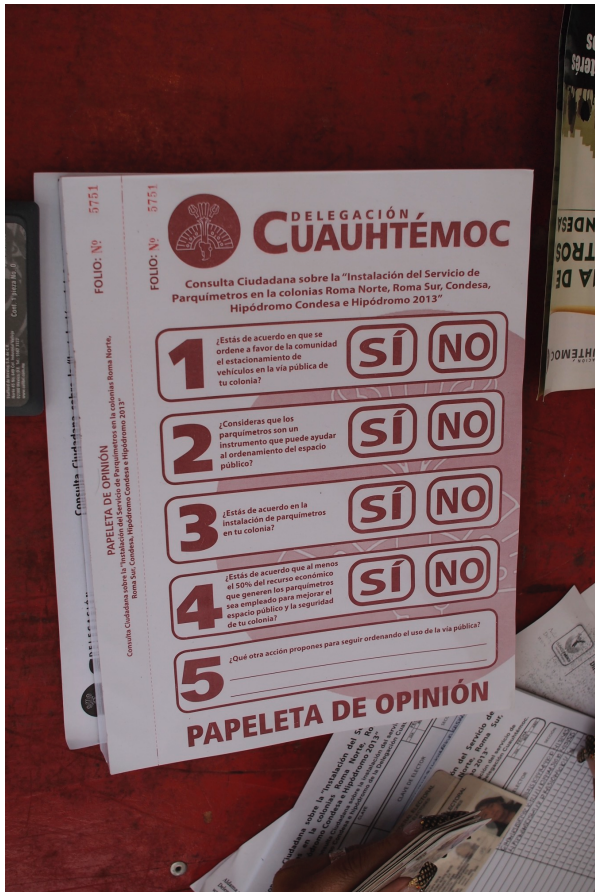
The voting took place on January but only a small percentage of registered voters in the area participated. The consulta had been organized in 12 different voting stations. Each station was assigned to a group of blocks and only residents of those blocks could vote. The results would also be counted on a section by section basis and not as an overall number. This was largely a strategy of the delegación, that did not feel confident in getting a majority of votes across both neighborhoods. Breaking these down into sections was controversial because it further fractured the neighborhood, however, it also guaranteed that the program would at least be implemented in some areas. The delegación hoped that if they could bring the program to at least a few blocks that would be enough to enroll the rest of the residents, who should be convinced of the benefits once they saw how their close neighbors were enjoying its benefits (“They will come and beg us to extend the program”, an AEP staff member told me). For the consulta, the delegación used a voter database from the local electoral institute, who also lent voting station equipment and anti-fraud devices. Nevertheless, neighbors complained of some cases wrongdoing such as names appearing in more than one voting station and of several “acarreados” (people paid to come from other areas to vote). While these cases were used at a later moment to dispute the validity of the consulta, the exercise took place without major incidents.

As it was expected, the residents were split and did not reach an agreement among themselves or with delegación. The results, thus, rendered a patchy map with several zones voting ‘yes’ and others ‘no’. Largely residential blocks adjacent to strips with restaurants and shops would get



parking meters but also, as some people feared, some blocks not far from those with parking meters would remain unregulated which would generate “cockroach effect” and make congestion even worse for areas not covered by the program. The Delgado, as promised, declared that the results would respected and only in the areas that voted yes the program would be installed.

Figure 5.8. Voting ballot for the consulta



### 5.6. Voting Exercises and the Lack of Meaningful Debates

In this dissertation I am using the concept of immediacy to point to how the practices behind the implementation and expansion of sustainable mobility projects are lacking in mediated debates about urban futures. These debates, as planning theorist have argued, should lead to plans that better respond to the needs citizens (Forester 1999; Fainstein 2011). Being that the Delegación had organized a Consulta, one would expect that weeks leading to the voting exercise would be marked by public participation exercises in which different ideas about how to fix street and sidewalk congestion would be debated. However, as I will show, that was not the case. Instead, AEP’s insistence on moving fast with a solution it had already defined as a best practice blocked the possibility of any meaningful conversation. Roma Condesa resident, on the other hand, expressed important critiques and potential alternative solutions, but there was never a possibility for a productive dialogue.

A couple of weeks after the consulta I met again with two active members of *Asociación* in one of Roma's more the iconic plazas, Plaza Rio de Janeiro. This plaza represents many of the things that make Roma and Condesa a very desirable area: despite being surrounded by some of the most upscale buildings of the zone, Plaza Rio de Janeiro remains a vibrant public space where residents from different socioeconomic levels interact. Being that it is close to a metro station, it is also often a destination for families of other parts of town that are looking to enjoy of a safe place to stroll or take children to the playground. AM and E were not defeated by the results of the consulta, on the contrary, they seemed energized and thought that in the voting exercise had residents had shown that they would not be complicit with the privatization of space or be coerced by the city.

For AM, Roma and Condesa's social composition and mobilization history was its biggest strength and what also set it apart from other areas and that would be key in their struggle. She put it very straightforward:

In this neighborhood there are a lot of middle class residents but also a lot of people from older generations that every day have less and less economic resources. But in general we are "clase media ilustrada" (well-read middle class), academics, painters, artists, we are used to not letting others take advantage of us...in other areas such as Polanco they saw the parking meter as something that signals status. You know, "I will pay for parking because I can, or I store my car in my own parking space"...but here people are not rich but you can't buy them with a gift card, you can't even suggest that because you will start a riot... (Interview with AM, 2/14/2013).

By using the phrase "well-read middle class", M stressed their middle class character and the fact that they could make decision on their own, independent political of cooptation as its often the case in poorer neighborhoods. Moreover, for them, the fact that the delegación was forced to conduct a consulta was also a sign of their mobilization and resistance capacity, which could be read in different ways:

The consulta is a recommendation that the Human Rights Commission made to the city and to the delegados. In other parts they did not do it but here they can't ignore it... But the truth is that they (the city) don't care what people think, that's that's why they use the consulta, because its not legally binding... and they spent a lot of resources on it...(Interview with AM, 2/14/2013).

In her view, the consulta had been a very smart move from the delegación because it is non binding but, if won it could bring legitimacy. The alternative for them consisted in pursuing the amparo for the whole program as a human right violation and an unconstitutional action. *Asociación*, they told me, remained convinced that the program constituted an attack on their *garantías individuales* (basic rights) and it was in fact a blatant privatization of public space. A put it in the following words: "Look, [city officials] are wrong. Think of what we are doing right now, sitting in this bench for two hours. If we follow their logic, we are privatizing space, do you see people complaining?". In the aftermath of the consulta and the irregularities that they found, *Asociación* was also seeking through the local electoral tribunal to revert the results. That was, however, a difficult task. As A put it,

“We rejected the consulta because it was unfair, non-transparent, there was voter fraud, but all that is not easy to prove. If the large parties could not do it in the last federal election, how could we?” . Here my interviewee was making reference to recent presidential elections in which the PRI was perceived to have committed extensive fraud” (Interview with AM, 2/14/2013).

I asked them about any other possible solutions to what seemed like a dead end in which neither of the parties would ever agree. E’s response was rather interesting given the context of a supposedly public consultation:

The problem is that (Ecoparq) is a taxation measure that does not offer anything in exchange. Unless you told me: we closed all the business that violated parking regulation and even with this we still need other policies. An in that case I would say OK, but let’s discuss other solutions. But instead they just say “there is over demand for parking”... Well, then what happened here, if 10 years ago that was not the case?... ..So what do they do with zoning regulation? How is it possible that you have old houses in which five or six people use to live and now that house is an office with 30 employees. Let’s say that half of them have cars, so you need 15 spaces. That’s why people take over the streets and put obstacles and all those things. And we are also against local residents of that also place obstacles to protect “their” parking spaces. I understand that that is wrong, but its the authorities’ fault, They don’t do a thing and for the last 20 years have not done a thing...(Interview with E, 2/14/2013).

With this statement, E exposed the most problematic aspect of how the program was defined by AEP and the delegación and what made it such a difficult “sell”: For residents, given other possible solutions to fix congestion, the parking meter was only a superficial fix that perpetuated existing dynamics that benefit businesses and politicians at the cost of old-time residents.

A few days after my meeting at Plaza Rio de Janeiro I visited ITDP again. I had previously spoken about the program with the ITDP Mexico director, who narrated the process of selecting Polanco and the advantages of having a pilot program that people could experience first hand, as the opening quote of this chapter shows. This time I spoke with the person in charge of Parking and Congestion management policy to get a better sense of how they perceived the processes leading to the consulta and the results. A. Samudio’s opinion was not much different to what AEP had told me. He was straightforward: “This program should not be put up for vote”. He argued that the problem once again was politics: in this case, that the Delegado of Cuahutemoc had been forced to ask citizens, which was a big problem. Moreover, citizens were unable to see the benefits because they had other ideas of what public space could be like and resorted to personalize arguments and attacks. “They keep arguing that Ebrard gave this (project) to the French because they found out that the devices are French made” or, for example “one time during an information session an old lady (generational) accused me of being a Jewish usurer” (generation and class) (Interview with AS, 3/16/2013).

Sañudo’s opinions were framed in the language of a non-politicized expertise vis a vis the neighbors long standing habits of petty corruption and lack of knowledge about planning and sustainability. Furthermore, personal attacks were seen also as indicative of residents biases that

impaired them to make a good decision. ITDP considered that Ecoparq is a program for the common good whose benefits are so obvious that it shouldn't be put up for debate. The key issue for this expert was how to enroll citizens in the program.

AEP and ITDP's strategies, however, were based on forcing citizens to believe that the program is beneficial and have never been about co-producing a solution to congestion problems. As my interviews show, opposing residents often had a very sophisticated understanding of the underlying zoning and planning problem. In contrast, ITDP underplays this and has taken a classist position, dismissing resident's proposals and arguing that they would not have the capacity to conceive of alternative plans to improve public space and livability in the area. One of these experts put it bluntly as he joked, "If we let citizens decide they are going to come up with Marcelo's Beaches again". This, in reference to a program that Mayor Marcelo Ebrard instituted several years before in which city parks were transformed into urban beaches for low-income residents that could not afford the trip to a beach town during spring break. This policy was heavily mocked as a populist program for the poor. That ITDP experts use this analogy shows the assumptions about what constitutes adequate use of public spaces and reinforces stigmas about spatial practices of urban poor that are framed as obstacles for the city's green modernization.

Months after the Roma Condesa results were made official, Ecoparq was deployed following the voting results of each section. This patchiness would greatly impair the effectiveness of the program. This could be seen as a victory, or a partial victory for Asociación de Vecinos, however, I argue that that is not the case. While they were able to partially stop a project they opposed, they were also not able to convince the city to consider other options. Moreover, the final result, a partial implementation of the parking program, wasn't a victory for the city either. In fact, the possibility of parking for free in nearby block eliminates the benefit of the parking meter.

## **5.7. Conclusion**

In this chapter I show how política de movilidad projects are at the center of new struggles tied to the social and economic transformations of Mexico City's central districts. In specific, the chapter shows how Ecoparq, a street parking managing project defined as a mobility intervention was contested by neighbors of a socially heterogeneous neighborhood. The conflict highlights how, despite the purported democratizing goals of política de movilidad, the technocratic logics that undergird this vision remain open for contestation.

The analysis of Ecoparq further illuminates important dynamics that undergird política de movilidad. First, it shows how technological and institutional (PPP) innovations are used to selectively disrupt informal and illegal governance arrangements. In this case, the parking meter aims to remove street informality, but does nothing to address zoning infringement. Furthermore, the electronic parking meter has been vested with the capacity to transform relationships between citizens and the city government. By introducing transparency and neighborhood committees, the program enrolls citizens as co-responsible for streetscape improvements. The mobilization of Polanco's success in subsequent stages of the program exemplifies how pilot projects are used by city officials and experts to convince skeptical publics of the feasibility of a top-down and technocratic vision of sustainable urban life.

Finally, the controversy around the project and the consulta shows the limits of the current understanding of what citizen participation in the co-production of green urban landscapes is and could be. In this case, the collaboration between AEP and ITDP did not lead to a more inclusive process, instead, it helped polarize the neighborhoods and provided the city with legitimacy to impose their plan. The experience of Asociación de Vecinos Roma Condesa was not one of success, but it is indeed an important case that adds to our understanding of how greening urban policy and displacement intersect in public space improvements. Simultaneously, the partial failure of the city to implement the project comprehensively also how meaningful debates about how to implement projects, which should be mediated by planners, are indispensable for achieving movilidad's purported goals.

## Chapter 6. Institutionalizing Política de Movilidad

In 2014, eight years after the inauguration of Metrobus, the city's transportation and roads agency, SETRAVI changed its name to Secretaría de Movilidad (SEMOVI). The renaming of the agency was one result of the approval of a new transportation law, the Ley de Movilidad (Mobility Law), which came to replace the existing Ley de Transporte y Vialidad (Transportation and Road Law). This represented the institutionalization of política de la movilidad as an urban policy. In the following paragraphs my analysis comes full circle to show how the initial technocratic concerns and political tensions that shaped the Metrobus Project—and later Ecobici and Ecoparq—were institutionalized by this new law and in the retooling of the transportation agency.

### 6.1. The Secretaria de Movilidad, a Truncated Reform

Before being renamed to SEMOVI, SETRAVI's function was to regulate passenger and cargo transportation services and oversee the use of roads, infrastructure and other associated elements in order to guarantee the proper use and safety of pedestrians, cyclists, car drivers and passengers (Ley de Transporte y Vialidad 2002). While the law gave SETRAVI the responsibility to plan and manage roads, these functions were also shared with other agencies, such as Secretaría de Seguridad Pública (Public Safety Secretary) which is involved in planning but most often responds to the needs of efficiency (mostly solving road congestion) rather than long-term transportation planning. In prior administrations SETRAVI relied on external advisors, such as academics and renowned local transportation consultants to design its general plans. In this capacity, these experts advocated for an integrated system and other mechanisms for long-term transportation planning, however, they had very limited success (pers. comm with AM, 10/29/2013). Indeed, the general perception among experts and others was that the agency's priority was to manage contentious relationships with *transportistas* and taxi drivers (as discussed in Chapters 2 and 3) (pers. Comm. with EJ, 12/10/2013; XT 3/5/2013). Movilidad experts considered the agency's planning and management capacity to be limited by patronage arrangements and other political constraints. For instance, experts and activists often criticized the fact that during the Cuauhtémoc Cardenas' administration the agency eliminated the written and practical driving exam as a requirement for licenses in order to tackle internal corruption practices and lower the cost and time burden for new drivers (Animal Político 2014).

Given the interest in sustainable mobility projects, experts and astute politicians saw that the political conditions in the city were prime for promoting a reform of the SETRAVI. This reform, in their view, was necessary to make the agency compatible with the vision that experts and civil society had been developing with projects such as the BRT, Ecobici and Ecoparq (pers. comm. with LB, 4/27/2013). Indeed, it was ITDP and Emarq along with progressive city officials and local politicians, such as local lawmaker Laura Ballesteros who spearheaded this effort.

SETRAVI's reform had two main components. First, it aimed to define transportation as mobility and declare pedestrians as the main right-bearing subjects of the agency's mission and include urban sustainability as a required goal of transportation projects. Second, it sought to transform the legal framework for bus service concession by eliminating the single owner-operator model, which in turn would facilitate the transition into models that could better regulate privatized services, such

as the BRT. In other words, the new law would institutionalize the sustainable mobility paradigm and set a regulatory framework to expand public private partnerships. However, eight years into the development of this policy space, the debates around SETRAVI's reform would remain marked by those same concerns and dynamics that shaped the Metrobus Project: a technocratic understanding of policymaking based on best practices and consensus-based planning and a reluctance to dismantle existing political arrangements with the *transportistas*.

The first goal of the new law did not face much opposition, given that experts, civil society and city officials saw movilidad as compatible with their own agendas. In fact, the concept of política de movilidad, had been co-constructed by them through consensus seeking projects such as Ciudadanos con Visión (discussed in Chapter 3), in which city officials, experts and civil society had participated. In fact, these same exercises were used to legitimize the reform. A short description of one of these consensus-seeking events illustrates this point.

In 2013, a few months before the official transition into SEMOVI, I attended a meeting where SETRAVI officials would present the new Plan Integral de Movilidad, and general transport plan (PIM) that would be put in effect at the same time the transportation law was passed and the agency renamed. Dyhanna Quintanar, a former CTS, ITDP and Estrategia de Movilidad en Bicicleta director and at that moment director of planning at SETRAVI, presented the integrated transportation plan to what they framed as “the community”. The community present, in fact, consisted of transportation experts from ITDP and CTS-Embarq, transportation consultants, a handful of *transportistas*, pedestrian and bicycle activists and several academics. The meeting had two parts. The first one consisted of the presentation of the main ideas behind the plan and a brief report of the state of mobility in the city<sup>11</sup>. The second half of the meeting consisted of breakout sessions where the main ideas behind the new plan would be discussed and opinions and recommendations would be generated. The exercise was facilitated by Centro de Colaboración Cívica (CCC), who in 2010 had coordinated Ciudadanos con Visión.

I joined the breakout session that focused on Transit Oriented Development (TOD), a practice that CTS-Embarq and ITDP have been promoting for years. After a presentation from SETRAVI staff and some instructions from CCC facilitators the group of about 20 attendees were asked to discuss the idea following CCC guidelines and cast a vote on whether we considered that TOD should be included in the new plan. Notably lacking in this conversation were questions such as how TOD would affect land values and low-income housing, or how extensive TOD projects would be. Even basic questions, such as whether such a model was necessary in Mexico City or why urban development should be the responsibility of the transportation secretary were missing. Instead, the discussion focused more on questions such as how the term TOD should be translated into Spanish or what kinds of businesses could occupy the street-level commercial spaces that these developments would ideally have. When it came time to cast our vote, the options were limited to: a) “I like the TOD proposal as is”; b) “I like the proposal but I would like to learn more about it”; or c) “This is a terrible idea”. As we finished our voting exercise and option b was selected by the majority of participants, we were told that the CCC staff would compile the results from these and

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<sup>11</sup> This report repeated the findings of EOD 2007, used to develop EMB (see chapter 4) with slight updates done with bicycle use data collected by a team of UNAM geographers and ITDP staff members at random points in the city.

all the other simultaneous exercises and incorporate them to the proposed plan that was being drafted. The day ended after all breakout sessions reconvened for one final meeting in which we were thanked for our collaboration and commitment co-producing Movilidad Policy in collaboration with the government and were ensured that the PIM would reflect our concerns. I never received an invitation to a follow up event. As with many other similar events in which plans were presented, such as that in which Ghel presented EMB to Bicitekas (Chp. 4) or the one in which AEP officials presented Ecoparq to Roma and Condesa neighbors (Chp. 5), the event I attended did not generate spaces for a critical analysis of the problem in which experts and citizens could debate. Instead, this exercise, as the others discussed in prior chapters, served only to legitimize the new general transportation plan and upcoming reform.

The second goal of the new law, transforming the regulatory framework for public transportation concessions and eliminating the figure of the single owner-operator, proved to be more challenging and evidenced the prevailing tensions between reform aspirations of progressive officials and experts and the city's reluctance to do away with long-standing political arrangements with *transportistas*.

The task of drafting the new mobility law was given to a special committee on mobility (comisión de movilidad) in the local legislature, which was led by Claudia Cortés Quiroz (PRD) and Laura Ballesteros of the center-right Partido Acción Nacional (PAN). The process of drafting the law was marked by an important difference between these two lawmakers. Ballesteros was a proponent of a law that eliminated the single-bus-operator, while Cortés Quiroz' proposal kept the option of having single bus owner-operators.<sup>12</sup> I interviewed Ballesteros and attended events with *transportistas* in which Cortés Quiroz presented her version of the law. It was clear to me that Ballesteros was a young politician new to the topic of sustainable transportation but who quickly inserted herself in this circle of progressive politicians, experts and civil society actors<sup>13</sup>. Cortés Quiroz, in contrast, was a well-seasoned politician with strong ties to the PRD who had full support of those *transportista* groups that were not as open to embrace movilidad models, which they saw as an attack on their livelihoods (as I witnessed in *transportista*'s interventions in a public event organized by Cortés Quiroz).

The process of agreeing on a draft of the law lasted several months, in which both versions of the law were promoted in different public events and debated in the legislature. At the end, the draft that was voted on and eventually approved consisted in elements from both visions. The law embraced the language of movilidad and instituted what experts and activists call the inverted pyramid, which determines the hierarchy of street and road users that places pedestrians (who are the most) at the top and car drivers (who constitute the smallest number of users) at the bottom. But the new movilidad law did not restrict single owner-operators from acquiring a concession,

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<sup>12</sup> In technical terms, the debate was about permitting that *persona física* (a natural person) could have a concession or restricting them to *personas jurídicas* (legal persons).

<sup>13</sup> For instance, at first she advocated for the motorcycle as sustainable transportation but was quickly criticized by experts and later eliminated this from her discourse and draft of the law. Ballesteros would later run, unsuccessfully, for the Benito Juárez Delegada seat, with movilidad as one her main policy proposals.



evidencing that the political commitments inherited from the PRI period and that had been re-framed as right to a livelihood by the PRD had prevailed.

Figure 6.1. Movilidad pyramid (Source. SETRAVI)



With the approval of the law, SETRAVI changed its name to SEMOVI but keep most of its organization without much change, and would still devote most of its staff and resources to licensing, permits and dealing with taxi and bus concessions. The agency, however, inaugurated a new Sub-Secretary of Movilidad, in charge of implementing a coordinated approach to sustainable mobility projects and promoting further reforms.

Ultimately SEMOVI, with its new law and transportation plan but with its truncated reform and contradictory embracement of both technocratic concerns and old political arrangements embodied the institutionalization of política de movilidad as a policy space and the logics and practices that made possible the projects discussed in this dissertation.

## 6.2. Dissertation Conclusions

### 6.2.1. Main Arguments and Findings.

The dissertation argues that sustainable transportation projects in Mexico City, while constructed as examples of a commitment to democratic planning and the redistribution of infrastructure investment, in practice have been implemented in a top-down fashion, legitimized by a handful of experts and NGOs that have targeted central districts of the city. Along with these projects' technological upgrades, such as high-quality buses and electronic parking management systems, a series of controversial governance reforms have introduced market logics that grant the private sector a central role in the provision of transportation infrastructure and services. Moreover, the implementation of these reforms are enabling the re-valorization of central neighborhoods and

generating new forms of spatial inequality. The inequality produced is not only spatial. Sustainable transportation initiatives also produce differentiated publics, reducing participation to a handful of non-state actors, namely experts and international NGOs.

To press these claims, I traced the development of *política de movilidad* in Mexico City and showed the political and material effects of sustainable transportation projects. I analyzed *movilidad* as a policy space in which multiple actors within and outside the state and across multiple scales have come together to redefine the goals, mechanisms and technologies used to plan and implement transportation infrastructure. In this analysis I used the concept of infrastructural citizenship to analyze those encounters between the government and citizens that are mediated by physical infrastructures and make evident forms of inclusion and exclusion in the city.

I drew on the concept of immediacy to analyze the practices that make possible these sustainable transportation projects. With immediacy, I bring attention to three important policymaking practices and their effects. First, I argue that the need for an immediate response to environmental crises is generative of new policies that must be implemented quickly, mostly, by bypassing existing bureaucratic and political structures. Second, I show how first-hand, immediate, experience is as an important temporal-spatial dimension of policymaking. By building pilot projects that appear successful and can make sense to any resident, city officials minimize conflict and bring legitimacy to controversial interventions. And third, I propose that the metaphor of immediacy complicates understandings of the role that infrastructures play in shaping public debates around green futures. *Movilidad* projects postpone inclusive planning processes in which planners mediate debates in which citizens, experts and officials co-decide on how to make the city more sustainable and democratic. I showed how these dynamics play out in three empirical chapters.

In Chapter 3, I examined the process of inception and implementation of the BRT system. The chapter showed how the actors that came together around *Proyecto Metrobus* framed the BRT as a technically sound solution that could help bypass long-standing political and institutional constraints for effective transportation and air quality management policy. In devising the BRT implementation plan, PRD officials translated a global transportation best practice into a pro-democracy project of the left, creating a contradictory approach to sectoral reform that would be carried on in future projects. Moreover, *Metrobus* opened the door for international development institutions, global philanthropy and international NGOs to influence the design and execution of sustainable transportation policy. These actors effectively promoted the adoption of technocratic mechanisms for citizen participation and defined sustainable mobility along a narrow set of international best practices that shaped *política de movilidad* as a policy space.

In Chapter 4 I traced the evolution of the bicycle planning agency, *Estrategia de Movilidad en Bicicleta (EMB)* and its most important project, the bikeshare system *Ecobici*. In the wake of the *Metrobus*' successful implementation and with the arrival of a new progressive mayor, Marcelo Ebrard, sustainable mobility became a flagship project of the local administration. Ebrard and his team saw sustainable transportation as a policy that had the capacity to bring them local, national and international visibility. Following the precedent set by the BRT, Ebrard sought to produce innovative projects in a short period of time, a decision that had two effects. First, it consolidated the role of NGOs and experts as indispensable actors that could provide technical assistance and legitimize 'fast' global best practices. These actors, in turn, privileged the implementation of

bicycle infrastructure in selective areas of the city in order to grant the project greater visibility. Secondly, it reinforced the strategy of creating ad-hoc agencies and public private partnerships to bypass institutional and bureaucratic constraints. The case of Ecobici also shows how pilot projects were used to enroll publics into a narrow and top-down vision of a sustainable city. To demonstrate that this vision was feasible, experts re-signified the bicycle from a mode of transportation for the poor in the periphery to an aspirational mode of transportation for middle class professionals working and living in central districts. The chapter also shows how sustainable mobility projects are reinforcing existing and generating new patterns of infrastructure inequality and spatial difference.

As I showed in Chapter 5, *política de movilidad* projects are interventions that rationalize streetscapes and are at the center of struggles around the social and economic transformations of Mexico City's central districts. As my analysis of the conflict around the expansion of the parking management system Ecoparq shows, the purported democratizing goals and technical benefits of *política de movilidad* are not free from contestation. This case shows how technological and institutional innovations are used to selectively eliminate informal and illegal street practices while providing a quick solution to other forms of zoning infringement that are behind the current economic boom of central districts. This conflict also shows the limits of the current understanding of citizen participation. In this case, immediacy, evidenced in the adoption of fast solutions and the mobilization of a pilot project as proof that a greening reform is possible, did not lead to more inclusive planning. Instead, it polarized the process and led to an ineffective parking management project.

In the first section of the current chapter, Chapter 6, I showed how the initial technocratic concerns and political tensions that shaped the Metrobus Project were institutionalized in a new transportation law and renamed Secretaría de Movilidad. In the process that led to the transformation of SETRAVI into SEMOVI city officials and NGOs worked together to institutionalize a mechanism of consensus building, guidelines for public private partnerships and determine what constitutes adequate sustainable mobility. The approval of a new law formalized contradictory technocratic concerns and political arrangements that have limited the possibility of effective transport and air quality policy.

### **6.3. Climate Change, Urban sustainability and Citizenship.**

The rise of climate change as the planet's most critical challenge has transformed public perceptions of cities and urban life. Cities, long seen as sources of pollution and undesirable congested environments, are now considered an indispensable component of plans aimed at combating the current environmental crisis. But for cities to fulfill this role they must undergo substantial infrastructure retrofitting. Experts, practitioners and scholars have long identified which interventions need to be undertaken and often prescribe fast solutions to reduce carbon the footprint in the form of densification and the adoption of sustainable transportation systems, among others. The current consensus around the need for and the nature of such infrastructural retrofits generates an important question for the study of urban citizenship: How is it that climate change adaptation, as a global and purportedly universal problem, is affecting the prospect of urban democracy?

The project of achieving urban sustainability and reducing carbon emissions, just as the modernization project of several decades ago, presupposes citizens that will universally enjoy the

benefits of infrastructures planned following technocratic rationality. However, as I have shown here, urban greening interventions are reinforcing existing and generating new forms of differentiated citizenship. Clearly, I am not arguing here for the status quo, for that would not solve climate change nor reduce inequality. Instead, I suggest that the task at hand consists of exposing how understandings of urgency, an environmental common good and co-responsibility are shaping the prospect of a sustainable and democratic urban future. This dissertation, provides three insights that can be helpful for scholars and practitioners of planning across the globe that share this concern.

First, this work shows how the urgency to deal with environmental crises and the need to enact fast policies lead to the creation of parallel governance structures that impact the possibility of democratic planning. Ad hoc agencies such as Estrategia de Movilidad en Bicicleta (Chp. 4) and Autoridad del Espacio Publico (Chp. 5) and the public private partnership frameworks that they regulate constitute the institutional infrastructure that makes possible the global circulation and adoption of best practices. But as the examples of Ecoparq and Ecobici illustrate (Chapters 4 and 5), with the creation of ad-hoc agencies and regulatory innovations officials are not only bypassing bureaucratic hurdles but also eliminating requirements for public transparency and accountability and impairing the possibility of long-term planning.

Secondly, the cases presented here also provide insight into the processes that generate uneven green development beyond traditional notions of neighborhood gentrification. Rather than focusing solely on neighborhood displacement, the analysis of política de movilidad shows how contradictory understandings of inclusion and redistribution play out in the advancement of green agendas. For instance, the case of the bicycle presented in Chapter 4, shows how a daily practice associated with the poor got picked up by green boosterism and city worlding efforts (Roy and Ong, 2011) linked to entrepreneurial green urban strategies. Displacement in this case is not the expulsion of low-income residents but the appropriation of certain practices for a new public and the simultaneous exclusion of poor districts from new investments in bicycle infrastructure. On the other hand, as the case of Ecoparq discussed in Chapter 5 shows, discourses of livability, transparency and participation can be mobilized for the selective disruption of extra-legal practices. The removal of informal parking attendants (franeleros) was meant to provide a quick solution to other practices of illegality, namely, zoning infringement for commercial and office spaces in central districts. The selective deployment of policies and infrastructures reinforces spatial inequalities and territorial stigmas and makes evident how the link between green policy and uneven development is a multi-scalar problem.

Finally, examining the infrastructures and practices that make possible the fast implementation of sustainable transportation projects sheds light on some of the most salient paradoxes of greening reforms. Sustainable mobility projects in Mexico City have been made possible thanks to a series of privatizing reforms that are also considered to be central to a project that seeks to democratize urban planning. This project is built on a definition of sustainability as a universal good and an agreement on the need to share the responsibility of combating climate change among all citizens. Furthermore, this view implies that the adoption of sustainable lifestyles will generate social inclusion and a more democratic urban space. The cases of Metrobus, Ecoparq and Ecobici illustrate how experts manufacture successful projects in order to enroll citizens into their vision of environmental co-responsibility. As this dissertation shows, the immediate first-hand experience of

an infrastructure project that appears to “make sense” regardless of its technical benefits is a powerful tool to legitimize a controversial reform. This, however, is not the only role that immediacy can play in urban policymaking. First-hand experience, as a form of knowledge production, can also be used to disrupt ideological conceptions of the world and create other forms of knowledge (Ireland, 2004). Furthermore, an attention to more pragmatic understandings of knowledge, change and transformation (Friedmann 1987; Woods 2012) can also harbor the possibility of incorporating other sustainable practices and to solutions that are truly public—in the sense that they are broadly debated and enjoyed—and which are indispensable for a more democratic version of the green city

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