Planning for Mobility and Socio-Environmental justice?

The Case of Medellín

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1. Introduction

The aim of this chapter is to examine how the issue of transport mobility can contribute to the debates about the relationship between resilience and environmental justice. It will do so through the case of the *Metrocables*, the world's first modern urban aerial cable-car linked to a mass-public transportation system. This was implemented in the early 2000s in Medellín, Colombia's second largest city, with some 3.5m inhabitants.

The *Metrocables* were developed in the context of a range of urban interventions seeking to address the city's notorious levels of violence in the 1990s and early 2000s. With Medellín's reputation as one of the world's most violent cities, linked to the emergence of illegal armed groups and the narcotics export business, reclaiming the safe and civic use of public space was a critical political and planning challenge. This issue was an important consideration in the transport projects pursued in the 1990s and 2000s, where "…(T)he recovery of public spaces was perceived as an effective deterrent to violence and crime" (Stienen, 2009, p. 120). The statutory basis for addressing urban public space as a priority was provided by the 1989 Urban Reform Law in Colombia, which redefined public spaces as areas for meeting collective urban

needs and the safety and peace of citizens, and the 1991 National Constitution, which recognised public space as a constitutional right, with public authorities designated as its guarantors. (Stienen, ibid)

It is projects like the *Metrocables* that have earned Medellín a place in the 100 Resilient Cities Challenge[1], an initiative launched by the Rockefeller Foundation in May 2013. Yet, the label 'resilience', as used by the municipality's Chief Resilience Officer[2] appointed in April 2014 in response to this initiative, was not visible in the discourse and practices related to the development of the *Metrocables* and associated urban projects by earlier municipal administrations.[3] Nevertheless, it is worth asking whether the Medellín experience might contribute to contemporary debates on resilience and its relationship with environmental justice.

2. Defining resilience and environmental justice in relation to transport mobility

It is not that mainstream transport planning has not acknowledged the importance of the environment. Rather, it is the theoretical, conceptual and methodological approach within mainstream transport planning and how it addresses environmental issues while marginalising social issues that needs deeper scrutiny if contemporary cities are to address the enormous socio-environmental challenges and inequalities they face in the coming decades (Baeten, 2000; Jones and Lucas, 2012; Levy, 2013a). In building

[1] See **http://www.100resilientcities.org/** (accessed 20 June 2015)
[2] See **http://urb.im/live/blog/wuf7/md/140410a** (accessed 20 June 2015)
[3] Medellín, with 2.3 million inhabitants, is the most populated and richest municipality in a metropolitan area comprising nine municipalities and a population of 3.5 million. In this chapter, the local administration refers solely to the municipality of Medellín.

a framework through which to examine the Medellín experience and its contribution to socio-environmental inequalities, it is important to acknowledge and challenge at least three related contentions about mainstream transport planning.

Firstly, the neo-classical economic and behavioural approaches underpinning mainstream transport planning do not recognise the power relations and structural drivers that underpin the relationship between mobility and urban development (Levy, ibid). Thus, distributional questions in development are marginal in traditional approaches to transport planning (Braeten, 2000; Leinbach, 2000), resulting in its complicit reproduction of socio-environmental and spatial inequalities in cities. (Vasconcellos, 2001) As a result, mainstream transport planning has given relatively little attention to the relationship between transport, and poverty and exclusion in the city (Lucas, 2012 and 2006; Stanley and Vella-Brodrick, 2009) as well as to the distribution of environmental hazards and risks and their interaction with transport systems.

This neglect might explain, in part, both the emphasis on resilience in traditional transport planning rather than socio environmental justice, as well as the treatment of resilience itself. Resilience is perceived largely in physical terms, for instance, resilience "as the ability of the transport network to withstand the impacts" of physical environmental threats (in this case extreme weather) and "to operate in the face of such weather and to recover promptly from its effects." (UK Government Department for Transport, 2014, p. 8) While this does not reflect a more inter-disciplinary understanding of resilience, it does echo the ability to bounce back or return to a state where the essential activities of life can continue to function well

within the existing status quo, a key element of its definition within environmental literature. (Pelling, 2011)

On the other hand, a focus on socio-environmental justice is predicated on an acknowledgement of power relations and how transport is implicated in the creation of inequalities in the city, concerns that are largely beyond traditional transport planning. Indeed, the embrace of neo-liberal policies by mainstream transport planning in most parts of the world, with increasing privatization of public transport provision and management in an alleged bid for more 'efficient' urban transport practices, has pushed socio-environmental inequalities even further from transport agendas. This lacuna has resulted in a growing critique of the contradictory character of notions like 'sustainable mobility' in contemporary cities (Essebo and Baeten, 2012), such notions pointing to the conflict between promoting economic growth alongside addressing environmental risk and socio-environmental injustice in contemporary and future cities.

In this chapter we argue for a recognition of the way intersecting power relations of class, gender, age, race, ethnicity, religion and sexuality are articulated in the relationship between transport mobility, urban development and the environment. Taking this position has implications for notions like travel choice and the ability to address issues of "deep distribution", defined as "an understanding of transport based on the articulation of power relations in public and private space at the level of the household, community and society that generate the structural inequality and dominant relations under which decisions about 'travel choice' are made" (Levy, 2103a:52). It also implies a shift from resilience as the maintenance of the status quo

(even if there are planning attempts to make transport mobility fairer) to socio-environmental justice, in which structural inequalities are challenged to support a system of transport that enables the exercise of equal rights in the city (Parnell and Pieterse, 2010).

The second contention concerning mainstream transport planning is that it does not acknowledge the social significance of public space in transport. (Levy, 2013a and 2013b) Mainstream transport planning is less likely to be concerned with the often exclusionary experience of different social groups in the public spaces created and shaped in part by the modes and channels of urban transport because of its lack of recognition of the social position of transport users. It is also less likely to be concerned with deep distribution issues and the right to appropriation of public space in the planning and design of urban transport. This chapter will demonstrate that the right to public space is a central consideration in shifting from resilience to socio-environmental justice in transport.

The third contention is that the essentially expert-led and top down character of mainstream transport planning does not consider citizen participation in decision-making about transport as an important part of the planning process. Indeed, taking on more “bottom up strategies will require a sea change in the traditional attitudes of transport experts and the organizational culture of the profession.” (Booth and Richardson, 2001:148) This chapter is premised on the observation that without attention to citizen participation in decision-making, transport planning cannot effectively address questions of socio-environmental justice.

In challenging these contentions in traditional transport planning, the chapter argues that a focus on the concept of resilience as the ability to bounce back but maintain the status quo is not enough to address the challenges of mobility in contemporary cities. Given growing socio-environmental urban inequalities in most parts of the world, focusing only on resilience may end up creating the conditions for a differential sustainability, that is, "by adjusting [socio-environmental] thresholds to meet the needs and wants of certain privileged social groups and territories at the expense of others." (Allen, 2014: 523-4) In so doing, such a focus will fail to address a more transformative transport agenda that tackles questions of deep distribution in the socio-environmental conditions of cities. Nevertheless, Pelling argues for a linked relationship between this more transformative agenda and resilience (plus a transitional adaptation between the two that relates to incremental change), a relationship that is both "…nested and compounding… Nesting allows higher-order change to facilitate lower-order change so that transformative change in a social system could open scope for local transitions and resilience. Compounding reflects the potential for lower-order changes to stimulate or hinder higher-order change. Building resilience can provoke reflection and be upscaled with consequent changes across a management regime, enabling transitional and potentially transformative change…" (Pelling, 201: 24-25)

This paper proposes that a focus on socio-environmental justice will take us closer to a more transformative urban transport planning agenda in contemporary cities, one which addresses the structural causes of inequality. Building on the debates about social justice between Iris Marion Young (1990, 1998) and Nancy Fraser (1996, 1998a, 1998b), and on their use in the examination of environmental justice (Allen

and Frediani, 2013) and of transport and the just city (Levy, forthcoming), socio-environmental justice is defined as comprising the three intersecting principles of *redistribution*, *reciprocal recognition*, and *parity political participation*.

In line with the arguments above, the domain of *redistribution* is understood as an approach to transport planning that addresses the underlying relations of deep distribution underpinning material conditions in the city. This domain embraces both socio-economic and environmental resource inequalities and exposure to hazards in the city.

The principle of *reciprocal recognition* (Levy, forthcoming) is explored through the politics of recognition "where assimilation to majority or dominant cultural norms is no longer the price of equal respect." (Fraser, 1996: 3) In the context of transport, the domain of reciprocal recognition "concerns the two-way relationships between the recognition of difference (of transport users) in institutions, policies and daily urban practices, and the recognition by oppressed women and men themselves of their own rights" (Levy, forthcoming) with respect to accessibility and mobility in public space associated with transport modes, routes and hubs.

The third domain focuses on *parity political participation* and combines Young's notion of political participation and Fraser's notion of 'parity participation', based on her arguments that "justice requires social arrangements that permit all (adult) members of society to interact with one another as peers." (Fraser, 1996: 30) This goes beyond top down regulations for formal legal equality, and interacts with both the material conditions that will enable women and men to participate politically (for

which redistribution is a precondition) along with the "intersubjective" conditions for mutual respect between diverse people and the achievement of social esteem (for which reciprocal recognition is a pre-condition). This emphasises the interdependence between the principles of socio- environmental justice.

The Medellín case offers an opportunity to explore a set of urban practices related to transport and mobility that, as will be shown, was in part embedded in a discourse of rights and redistribution (Coupé *et al.*, 2013), although there were other more instrumental aims as well. One of the central tenets of the programmes that followed on from the first *Metrocable* line in 2004 was to address the growing socio-economic and spatial marginality of a large proportion of the population in specific areas of the city. The next sections will reflect on the *Metrocables* and these associated programmes through the tripartite lens of socio-environmental justice discussed above. The case study arises from a two-year research project coordinated by the Development Planning Unit, UCL, involving researchers in Medellín, Bogotá and London (Dávila, 2013).

3. Medellín's *Metrocables* and urban upgrading: Redressing imbalances

The remarkable changes that Medellín has undergone over the past two decades, from an almost pariah city with high levels of violence, unemployment and poverty, to "a city with potential for long-lasting success" (Wall Street Journal, 2013), can be attributed in part to the actions of a strong and proactive local state, highly focused on physical interventions in public transport, housing, social infrastructure and public

space, and greater democratic openness in decision-making. To what extent did these potentially distributional interventions address deep distribution issues?

Medellín today is a more liveable city than in the 1990s, at the height of the violence that marred daily life, especially for the urban poor who had to contend with high homicide rates resulting from the interaction of a complex web of actors comprising left-wing and right-wing militias, armed gangs, and common criminals. (Hylton, 2007) Economic liberalisation had led to high unemployment and a flood of imports including textiles, garments, and other areas of manufacturing in which Medellín had had a primary position in the Colombian economy from the 1920s. (Stienen, 2009)

As inter-personal inequalities increased,[4] formal sources of employment dwindled leading to the multiplication of informal street vendors. This, coupled with a perceived rise in criminality in some of the more central public spaces, encouraged the middle classes to retreat to enclosed spaces and guarded buildings. Most low-income settlements on the steep hills that rise up from the river valley where the historical city centre sits are largely the result of the illegal occupation of land designated in successive master plans as unsuitable for housing due to the high risks of landslides. Informal settlements occupy less than a quarter of the city's area, and yet they house over half of its population, many of whom rent the dwelling in which they live. Although authorities have regularly evicted settlers and occasionally demolished shacks in what they consider as illegal settlements since they first made

[4] By the early 2000s Medellín had the second highest level of income inequality in Colombia, in turn one of the world's most unequal societies. The city's Gini coefficient was 0.55 in 2002, only exceeded by Bogota's at 0.57. In both cities, and the country as a whole, inequality dropped in the decade after 2002, due in part to social investment programmes. See Angulo (2014).

their appearance in the 1940s, until the mid-2000s these settlements were tolerated and gradually legalised, without toning down a discourse of risk which was meant to deter future low-income occupants of the steep hills. The presence of sturdily built high-rise buildings on the same steep hills in wealthy neighbourhoods a few kilometres south, however, starkly demonstrates that risk is a relative concept that can be overcome with plentiful capital and technical know-how.

Medellin's cable-car lines are pioneers in the use of ski lift technology conventionally used in tourist areas to help meet the mass transportation needs of inhabitants of dense and hilly low-income settlements. Among the system's advantages are the speed at which a line can be built (pylons need little space), the comparatively low cost (under US$30 million for the first line, under US$50 million for the second one), the lack of localised emissions, and convenience, especially for passengers who do not need to carry large parcels. These lines are potentially a bold and imaginative step to redress deeply seated social problems.

The first *Metrocable* line, built under the municipal administration of mayor Luis Pérez (elected for the period 2001-2003), was one of several municipal interventions in what were seen as the most problematic low-income settlements. The administration of Pérez's successor, Sergio Fajardo (2004-2007), put in place an extensive programme of urban upgrading, social infrastructure, support to small firms and business skilling in some of the city's poorest districts. The administration coined the expression 'social urbanism' to describe a set of projects used to leverage a profound social transformation with a view to creating a new social contract. (Medellín and IDB, 2008).

Not overtly fond of the aerial cable-car lines as a mass-transit solution, the Fajardo administration focused on a programme of 'Integrated Urban Projects' (with the Spanish acronym PUIs) to build new public spaces, schools and public libraries, revamp existing parks, and support local businesses in three low-income areas of the municipality (Brand and Dávila, 2013). A key element of these interventions was the use of high-quality architectural design and materials, as well as the involvement of local labour in construction. Between 2004 and 2010, in *Comunas* (districts) 1 and 2 where the first aerial cable-car line was built, Fajardo's administration and its successor (led by mayor Alonso Salazar, 2008-2011) invested close to eight times as much (US$225 million) in these interventions than had been invested in building the line. Local residents made up 92 % of the labour force used in the construction of the projects in these *Comunas*. (Calderón, 2012) This meant approximately 3,400 new jobs (EDU, 2007a). Despite its scepticism, in 2006 the Fajardo administration built a second line, coupled with an Integrated Urban Project in the low-income sectors of *Comunas* 7 and 13, the districts served by the line.

These interventions sought an as yet timid but more effective re-distribution of wealth than had previously been attempted. (Dávila, 2009) Started with relatively isolated and somewhat random interventions by Perez's administration (such as the 'Bank of the Poor'), some of these were continued over the following three administrations. Crucial to these was a significant and growing source of annual income from *Empresas Públicas de Medellín* (EPM), a municipally-owned utilities company supplying basic services to Medellín and its neighbouring municipalities: generation (close to 24% of the country's total) and distribution of energy, water and sanitation,

and telecommunications. In effect, a multinational public company with assets in excess of US$10 billion that between 2010 and 2012 transferred close to US$1.4 billion in surplus to the municipal government, much needed cash for projects including in the city's low-income settlements (Coupé *et al*. 2013).

Despite difficulties in collecting reliable data in informal settlements and identifying robust cause-effect relationships, the evidence suggests that interventions in the poorer districts, although restricted to projects rather than city-wide interventions, appear to have contributed to increased incomes and reduced social exclusion in these areas. Reduced levels of violence and municipal investment in transport and other infrastructure led to a significant rise in economic activity in neighbourhoods close to the cable-car stations. Average incomes in these areas grew in real terms for both women and men when compared to the city's legal minimum wage (Coupé and Cardona, 2013). Similarly, cable-car trips have been associated with reduced social exclusion (Zapata Córdoba *et al*., 2014), while transport fares for those who can make use of the Metro system (including cable-cars and feeder buses) are lower than those who must use several buses in their trips (Coupé and Cardona, 2013). The intention of the local government to address 'social urbanism' in a highly unequal society does, therefore seem to have met with some success and could be said to have contributed to the increased resilience of the city. However, the political imperatives within the short window available to a local government elected only for a period of four years, as well as the localised nature of many of these interventions, also highlight the limits of collective action to confront deeper processes of maldistribution in the city.

4. The 'politics of recognition'

The lens of the politics of recognition in Medellín offers "…an in depth exploration of the discursive powers shaping governance practices at various spatial levels." (Ernste *et al,* 2012: 512) In the 1990s, national, regional and local government waged a state-led campaign to reconstruct a collective vision for Medellín in the face of social disintegration, economic stagnation and high levels of violence in the city. As discussed in section 3, this campaign comprised physical and spatial urban renewal in which the Metro Company played a key part and in which high quality design and architecture was used "as a 'technology of power'" (Rabinow, 1983 in Stienen, 2009: 109) to re-engineer physical as well as social relations in the city. With its roots in the 1989 Urban Reform Law and the 1991 Political Constitution of Colombia, the state was given the "duty…to protect the integrity of public space and its dedication to common use, which has prevalence over individual interests." (Colombian Government, 2015) Therefore, the politics of recognition that was played out around the *Metrocables* in Medellín has its roots in prior processes at national and local scales.

The campaign also comprised a discursive reconstruction of the image of Medellín as a proud city and all sectors of its population as urban citizens. The political struggle for recognition and discursive power in the city formally started in 1991 when local government set up *Mesas de Concertación* (public Round Tables) and Open Forums in which grassroots organizations, local NGOs, trade unions, universities, the municipality and the city's business sector participated in order "to confront violence and to rebuild social cohesion and civilized social order." (Stienen, 2009: 112)

Continued through the 1990s, this collective initiative was acknowledged by all involved as an 'educational process', contributing to the building of reciprocal recognition in the city. But who was educating whom about what? And who and what were being valued in this process? In her research of this political process, Stienen (2009) shows that fault lines soon appeared. With respect to vision, while the Metro Company and local businessmen sought to make Medellín a 'world class city' (see also Dávila, 2014), progressive intellectuals, former activists and grassroots organisations were seeking to make it a more socially just city. They argued that the 'world class city' vision had translated into a war against informality. This reflected a lack of recognition of poor women and men, the quality of their lives and their livelihoods, for example, through the eviction of informal traders in the city centre. Another fault line that emerged was an unfortunate trade off between bread and butter issues promoted by grassroots organisations, and safe and 'civil' public space prioritised by the other local and national government and their allied interest groups. There was also unease amongst many involved about the moral tone of the coalition around the Metro Company. In the 1990s, alongside the construction and operation of the Metro, "…the Metro's operating company sought to bring in a *Cultura Ciudadana*[5], a set of conventions for dealing with violence, exclusion, and difference." (Stienen, 2009: 110) From 1996, this was reinforced in the city's transport system by the deployment of *Cultura Metro*, a set of norms of acceptable behaviour for users of the Metro system, enforced by Metro employees and, in apparent solidarity, by transport users as well.

[5] Stienen (2009: 110) makes the interesting observation that this can be translated into English as either 'urban culture' or 'civic culture'.

Through the 1990s, what was promoted as recognition 'for all' appeared increasingly to become recognition of a middle class notion of space and lifestyle in the city – though the lifestyles of the youth, so implicated in the violent gang culture, and poor sections of the population, also had some representation in the public debates. In fact, ultimately these public debates appear to be focused on "rebuilding and strengthening of the legitimacy of the state" (Stienen, 2009: 110) and on creating the basis for urban upgrading to support the aspiration of Medellín as a competitive city. (Dávila, 2014)

The politics of recognition in Medellín reflects the same conflicts into the 21st century. When mayor Luis Pérez championed the *Metrocables* as a redistributive project for the city, it had both spatial and symbolic dimensions: "…we must implement projects for the poor as if they were for the rich; the poor are entitled to more than conventional projects for the poor". (Coupé *et al*. 2013: 60) The extent to which the poor participated in these planning processes will be discussed in the next section. The fact that mayor Pérez could not get an insurance company to underwrite the risk of building the first line reflects the limited consensus and recognition of the poor by elements of the national and international private sector, despite a decade of open debate and the launching of a new civic project.

Mayor Fajardo's discourse around 'social urbanism' explicitly acknowledges that the city owed an historic debt to the socially marginalised districts of the city. However, while social urbanism, as a form of spatialised social policy (Sotomayor, 2013: 3), reflected a recognition by the state of poor areas in the city, it did not always reflect the voices of the poor themselves. Indeed, even before the first *Metrocable* line was built, the intellectuals and former activists, many of who had moved into local

government with Mayor Fajardo, "found themselves compromised with the interests of the city's establishment in attracting external investments. The interests of radical subaltern groups became unintentionally subordinated by the …[latter's] over-articulated voices." (Stienen, 2009:135) The fault lines that became apparent in the 1990s grew in the 2000s, exacerbating "the tension between aesthetic concerns and the grandeur of public works on the one hand, and claims by residents who cannot meet their basic needs, on the other." (Sotomayor, 2013: 12). For those in *Comuna 13*, a hilly low-income district west of the city centre, this fault line is most dramatically reflected in a set of public escalators built by the municipality, which was perceived by some local residents as symbol of mal-recognition in the face of the economic hardships and daily violence they still face. (Sotomayor, 2013)

5. Parity political participation

The greater democratic openness spurred on by the 1991 national Constitution, higher levels of education among the population as a whole, and the rise to positions of power in the municipal administration of individuals and groups seeking consensus, created a conjuncture for a new approach to urban governance and planning. (Medellín and IDB, 2008)

As mentioned earlier, a number of local institutions played important roles in these interventions. One was the Metro Company, a public company owned in equal parts by the Municipality of Medellín and the Province of Antioquia (of which Medellín is the capital city). A second one was the *Empresas Públicas de Medellín* (EPM), which

provided the basic infrastructure services to low-income areas but more crucially injected much needed cash into the municipality's coffers. A third one was the *Empresa de Desarrollo Urbano* (EDU), which after its creation in 2002 brought together experienced technicians, recent graduates and academics new to public administration to put into practice a range of well-designed projects. Under the banner of 'social urbanism', the Integrated Urban Projects (PUIs) brought in under Mayor Fajardo to operate alongside the *Metrocable*, put in place a process of community participation in the planning and design of public spaces and facilities.

The public sector was both the instigator and the executor of such projects. Led by an interdisciplinary group in the Urban Development Enterprise (EDU), this arm of the Municipality created a series of spaces for community participation, using a specified methodology comprising diagnosis, planning, design, construction and activation/maintenance phases. (Calderón, 2012) In the PUI-Nororiental, the first of these initiatives adjacent to *Linea K* of the *Metrocable,* the key moments in the participation process were: public hearings in the diagnosis stage to the development of Community Committees (CCs) created during more local meetings; the *Talleres de Imaginarios Urbanos* (Workshops of Urban Perceptions) and *Talleres de Imaginarios por Proyecto*" (Workshops of Project Dreams and Ideas) as vehicles for feeding community needs and ideas into the design of projects; and the *Pactos Ciudadanos* (Citizen Agreements) which sought to embed responsibility for project maintenance and sustainability. (Calderón, ibid) In his evaluation of the process, Calderón (ibid) notes that this first PUI demonstrated the administration's commitment to the success of PUIs. It increased local accountaiblity and reduced the negative stigma that these *Comunas* had in the city. However, Calderón also

questions the representativeness of the community and the CCs in the process, despite efforts to include the young and elderly, and the fact that "since the PUI-Model gave priority to the construction of public spaces and facilities, during the participatory activities discussions or solutions to other problems or demands that were highly prioritized by the community were not taken into consideration." (Calderón, 2012:11)

The PUI process operated alongside a range of other mechanisms put in place throughout the 1990s for communities to participate in city-wide planning processes. (Coupé *et al.*, 2013). This was implemented from 1997 and served as a mechanism to generate mutual trust between the state and communities (Carvajal, 2009). Drawing on Brazil's participatory budgeting methodology (Cabannes, 2014), the municipality invited local communities where PUIs were implemented to collectively decide on the use of a small but symbolically significant share of public investment, subsequent to the initial PUI process. It is interesting that, apart from deciding on ordinary physical investments such as containment walls and football pitches, the mechanism allowed local communities to prioritise investment from the municipal budget for scholarships for local youth to enrol in local university professional degrees, as well as in programmes promoting conviviality and citizen participation. Although the process was not explicitly gendered, some women appear to have been empowered through it. (Coupé, 2013)

The case of Medellín clearly shows the strong interaction between the socio-environmental principles of parity political participation, the processes of reciprocal recognition strengthened through participation, and redistribution of selected material

conditions like the creation and improvement of public facilities and public space in the city.

6. Conclusion

The case of the *Metrocables* and the related Integrated Urban Projects not only demonstrates the interactions between the principles of socio-environmental justice. It also highlights the tensions between the reciprocal recognition and redistribution through satisfaction of local needs on the one hand, and the increasing commitment to forge a competitive city on the other. "…(I)t is clear that Medellin's model of urban restructuring conveys the city's ambivalent aspirations of becoming, on the one hand, more democratic, equitable and inclusive through redistributional infrastructure and anti-poverty programs; and on the other hand, a better fit for attracting foreign capital investment through the internationalization of an emblematic experience of resurgence." (Sotomayor, 2013: 13)

The physical/spatial and discursive construction of the notion of social urbanism and the resulting reconstruction of the right to public space related to transport was central in this process and raises a range of challenges on which to reflect. In physical terms, the combination of *Metrocable*, the transport intervention, and PUIs, the planning interventions, was critical in achieving spatial and socio-economic change, as indicated by the differential experience and impacts of Línea K and Línea J. According to Mayor Salazar, the local government sought "to activate the power of aesthetics as a motor for social change" (Brand and Dávila, 2013: 50). However, in reality this was only possible where the use of high quality engineering (the

Metrocables) and architectural design interventions (community libraries, housing and other public facilities), combined with focused spatial planning (the PUI initiatives) were undertaken with strong institutional commitments within powerful - and conflictive - political processes of change in the country.

What is impressive about the Medellín model is the speed at which these physical and spatial changes took place (for example, in the case of the implementation of community libraries, which was completed in 12-15 months). This is in part driven by the four-year electoral cycle. "Because mayors cannot be immediately re-elected, they seek to maximize political gain during their restricted tenure by accelerating project implementation." (Sotomayor, 2013:10) The quality and selection of physical interventions is also important, supported by strong technical and urban management capacity. For example, with respect to PUIs, "they display a great symbolic capacity to change previous imageries associated to marginal places, rendering a swift sense of transformation." (Sotomayor, 2013: 2)

While these physical interventions brought fast selective improvements for particular groups in the population, there is a question about the scale of redistribution and its basis in expressed needs. This highlights the limitations of pursuing a preconceived project approach (spatial and architectural focus on public facilities and public space) at the expense of other priority expressed needs and citywide regulation and planning respectively. In the case of Medellín, "the high degree of exceptionality required to implement a PUI, fails to challenge the processes by which socio-spatial injustices are created and reproduced in the city." (Sotomayor, 2013: 14) The wider challenge then is how policy makers and planners can combine bottom-up projects with citywide

planning to achieve more transformative processes that challenge structural inequalities in the city.

The Medellín case is also instructive in its commitment to the creation of a new discourse of citizenship around and through physical and spatial design interventions. As previously discussed, this built on a longer timeframe of building citizenship through a decade of public debate which, whilst contested, attempted to be inclusive. However, research on these processes "… suggest that Medellín's *Cultura Ciudadana* emerged out of two interrelated but different public spheres: the discursive controversy about the most legitimate forms of urban life in Medellín, including the tensions between formality and informality, and the city's emerging Metrospace. The former was structured by a multiplicity of voices, the latter by an authoritarian and exclusive normative order." (Stienen, 2009: 134)

In both theoretical and practical terms, we argue that this intentional reconstruction of discursive practices combined with material interventions highlights the political construction of 'myth' to create the framework and motivations for apparent transformation. (Essebo and Baeten, 2012) "(T)he logic of myth can reconcile seemingly opposing ideals into one coherent, emplotted and naturalised story…". (Ibid: 556) "(R) egardless… if we see it as a unifying story around which reformation can unite or as a keeper of the present order, myth affects behaviour in much the same way as personal belief guides everyday practice." (ibid: 559) Essebo and Baeten specifically focused on the construction of myth around sustainable mobility and the discursive and material tensions between mobility linked to growth, equality and

sustainability. The discussion in this chapter would suggest that the Medellín case reflects exactly these contradictory tensions.

At best, then, it could be argued that the example of transport planning in Medellín probably reflects an improving resilience along with transitional or incremental change, but not a transformation change that has altered the structural relation reproducing inequalities in the city. (Pelling, 2011) Thus, the *Metrocables* project and the promotion of 'social urbanism' in Medellín have only partially and differentially addressed the conditions for socio-environmental justice. While some redistribution was achieved, the limited scale and exceptional character of the planned interventions did not address deep distribution questions in the city. While extraordinary and bold processes for an inclusive deliberative politics took place in the city in the 1990s, building a collective consciousness about possible directions for change among many groups in the population, the *Metrocables* project and the PUI initiatives gave only partial recognition to selected poor citizens in the city. This was increasingly within a 'world class' city discourse reflecting middle class aspirations and lifestyles, as proponents of inclusive and deliberative citizenship were elected to power and increasingly bought into a unifying myth of citizenship created through a coalition of political, policy and business leadership. These contradictory tendencies spilled over into the participatory practices associated with both initiatives, and at best it can be argued that there was partial participation rather than parity participation.

As the tension between the inclusive and competitive city is played out in the future, attempts to re-direct, scale up and maintain a trajectory for city-wide socio-environmental justice may be increasingly derailed – perhaps even undermining the

future resilience of citizens and the city. Will the city's recent designation as among the 100 Resilient Cities Challenge address any of these critical contradictions to move Medellín more firmly onto a path of socio-environmental justice?

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