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**Moving past sustainable  
mobility towards  
a critical perspective  
on urban transport**

**A right to the city-inspired analysis  
of fare-free public transport**

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This thesis has been submitted in partial fulfilment of the requirements  
for the doctoral degree in Sciences  
at the Université libre de Bruxelles and Vrije Universiteit Brussel



## Acknowledgements

Writing a PhD dissertation may seem like an essentially individual achievement. And yet, this work would not even begin, let alone be completed, without the support of many people whose names cannot be put on the title page of this manuscript, and to whom I feel profoundly indebted and grateful:

My supervisors, David and Mathieu—for their belief and trust in my ability, their continuous involvement and interest in my work, and their unwavering and wholehearted support for my efforts.

The members of the jury examining this manuscript— Kobe Boussauw, Frédéric Dobruszkes, Anna Plyushteva, Stijn Oosterlynck and Tim Schwanen—for the time they gave to making this dissertation a (hopefully) more solid and convincing piece of writing. Your comments have undoubtedly improved the quality of my work.

My colleagues at Cosmopolis and IGEAT—for many inspiring conversations, and for words and moments of support and fun. Having you around made writing this manuscript much less tedious. I look forward to working with you in the months and years ahead, and hope to be a better colleague in future.

Inge, our secretary—for providing so much more than just technical support. Without your ability to solve the most complex of daily problems, I would never have been able to finish writing this dissertation on time, or in good spirit.

My hosts in different fieldwork sites across the landscape of fare-free public transport. Without the assistance and trust of H el ene Reigner (Institut d'Urbanisme et d'Am enagement R egional, Aix-Marseille Universit e), Allan Alak ula (Tallinn municipality), Tauri Tuvikene, Tarmo Pikner (Centre for Landscape and Culture, Tallinn University), She Chen and Ming Zhuang (Chinese Academy of Social Sciences, Chengdu) studying fare-free public transport programmes in contexts as diverse as Aubagne, Tallinn, Chengdu would have not been possible. Ait ah, merci,  谢谢.

My family—who raised, guided, and empowered the little boy who liked drawing public transport maps to write a doctoral thesis.

Last, but certainly not least—*mi compa era*, for her wisdom, patience and understanding. I promise I will not be writing another PhD anytime soon.

## Table of contents

<b>CHAPTER 1</b> Introduction	6
<b>PART ONE</b>	
<b>CHAPTER 2</b> “All transport problems are essentially mathematical”: The uneven resonance of academic transport and mobility knowledge in Brussels	74
<b>CHAPTER 3</b> Moving past the sustainable perspectives on transport: An attempt to mobilise critical urban transport studies with the right to the city	111
<b>PART TWO</b>	
<b>CHAPTER 4</b> More than just riding without a ticket? Exploring the geography of fare-free public transport	143
<b>CHAPTER 5</b> What the sustainable mobility paradigm does not see: a critical view on fare-free public transport in Aubagne, Tallinn and Chengdu	180
<b>CHAPTER 6</b> Participation and power in fare-free public transport in Aubagne and Tallinn: an urban regime perspective	216
<b>CHAPTER 7</b> Towards an urban political geography of transport: Unpacking the political and scalar dynamics of fare-free public transport in Tallinn, Estonia	242
<b>CHAPTER 8</b> Conclusion	270
<b>APPENDIX</b>	308

**Chapter 1**  
**Introduction**

# Introduction

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This chapter is based on a peer-reviewed article published together with Mathieu Van Criekingen in *Métropoles*.

## 1. Point of departure: alternatives in urban transport?

### 1.1. “Alternatives” to what?

This doctoral dissertation emerged out of interest in urban “alternatives.” A plethora of contemporary urban policies and practices claim to be dedicated to proposing “alternative” ways of producing and living the city (Beal & Rousseau, 2014; Bonfond, 2017; Parker, Fournier, & Reedy, 2007). The “alternative” label is thus carried by extremely heterogeneous policies, projects, spaces and resistances. They embrace diverse facets of urban life, including the environment (e.g. urban farming, community gardens, localities identifying themselves as “transition towns” or joining the movement of “slow urbanism / cittaslow”), housing (community land trusts, squatting, co-housing), economy and finance (local currencies and cooperatives, exchange and credit systems), urban planning (projects by the concept of “de-growth”, community planning, anti-gentrification strategies), urban governance and decision-making (participatory budgeting, practices of *autogestion*). When in 2013 the Brussels Institute for Research and Innovation (Innoviris) launched a call for research projects related on transport, I began to reflect what kind of “alternatives” could be identified and investigated in this particular field, and what kind of approaches could be used to study them.

Addressing these initial questions—in preparation of the eventually successful research proposal—meant facing one of key problems posed by the very term that unites “alternative” practices. While the notion of “alter-

native” is (over)used by a variety of urban actors, from social activists and academics to public officials and real estate developers, there seems to be no definition of “alternative” urbanity, urbanism, urban practices or policies. Furthermore, few attempts have been made at theorising urban “alternatives” (Beal & Rousseau, 2014; Purcell, 2008) and analysing them in a systematic way (Kębłowski & Van Criekingen, 2014). Consequently, as argued by Béal & Rousseau (2014), “due its potentially normative nature, the use of the term ‘alternative’ can [...] be problematic from scientific point of view.” Therefore, they continue, “we can begin by defining it by default, in contrast with what it opposes” (p. 5).

The opposite to urban alternatives—the urban “mainstream”—has for long constituted one of the classic themes of critical urban geography. Its scholars have provided strong evidence that across a great variety of localities and institutions contemporary urban agendas follow similar directions, and are executed according to similar policy-making practices. This particularly widespread and dominant approach to conceiving and implementing urban policy has been identified by David Harvey (1989) as “urban entrepreneurialism.” It is an essentially neoliberal strategy that prioritises supply-side interventions in the hope of making urban areas attractive to financial and human capital. To address broad urban challenges, it proposes to invest in specific urban areas and social groups, which is expected to generate trickle-down effects towards the rest of urban space and society (T. Hall & Hubbard, 1998), and leads to a significant reduction of the ambitions of urban welfare programmes. Urban entrepreneurial policies thus involve a high degree of speculation, and are socio-spatially exclusive, incorporating narratives of urban revanchism (Smith, 1996) and control over “unwanted” social problems and groups identified as detrimental to local “quality of life” and “business environment” (MacLeod, 2002).

The dominance of urban entrepreneurialism both depends on and results in a notable standardisation of policy agendas and tools across urban contexts. Engaged in inter-urban competition, various urban actors seek “best practices” and “recipes” for stimulating entrepreneurial patterns of urban development. They aspire to stay in tune with “policy fashions” coming from “paradigmatic” and “celebrity” cities such as Bilbao (for culture-led “regeneration”), Hamburg (“creativity”), and Vancouver (“sustainability”) (González, 2011). The pressure to replicate these “success stories” means that

there is little time for experiments or innovation, and instead there is a need to identify and apply proven, ready and comparable models (McCann, 2004; Peck & Theodore, 2010).

The repertoire of these “off-the-shelf” solutions, “sure bets” and “policy fixes” is remarkably limited (Peck & Tickell, 2002). Their circulation among urban institutions—referred to by political scientists as policy “diffusion” (Gray, 1973; Walker, 1969) and “policy transfer” (Dolowitz & Marsh, 1996), and studied by critical geographers under the umbrella term of “policy mobility” (McCann, 2011; McCann & Ward, 2011; Peck, 2011)—has helped to legitimise and sustain a very narrow spectrum of political options. Although the process of assembling and implementing urban entrepreneurialism in specific urban contexts is geographically variegated (A. Harris & Moore, 2013; McCann & Ward, 2012; Müller, 2014; Prince, 2010; Temenos & McCann, 2012), it has been argued that cities are moving toward a “new planetary vulgate” (Bourdieu & Wacquant, 2001) and a “global hegemonic discourse” (Peet, 2002). The consensus around urban entrepreneurialism thus contributes to a broad transition towards what Erik Swyngedouw identifies as “post-political condition” (2007)—a transition that is particularly evident on the urban scale.

Initial research conducted in response to the Innoviris call revealed that the urban entrepreneurial “mainstream” visibly permeates the field of urban transport. Its networks are increasingly perceived not just as frameworks for moving people, but also as tools for boosting urban competitiveness, and as elements of urban marketing strategies. Within urban entrepreneurial portfolios, instead of addressing mobility needs across urban space and society, transport is first and foremost conceptualised as a contributor to economic growth and competitiveness, achieved through continuously increased technical efficiency, capacity and speed. This is hoped to be realised through improving connectivity between strategic nodes and corridors on the one hand, and providing better access to transport for particular social groups on the other, in particular the more affluent city residents and users belonging to the “visitor” or “creative class” (Eisinger, 2000; Florida, 2002). This approach can be identified in a variety of urban transport instruments and projects. Improvement of public transport—for instance metro and tramway systems—increasingly plays a role in rent valorisation strategies (Gospodini, 2005; Koppenjan & Enserink, 2009; cf. Borja, Derain, & Manry, 2007), and often

induces gentrification (Grube-Cavers & Patterson, 2015; Lin & Chung, 2017). Consequently, development of transport networks may cause—rather than tackle—socio-spatial segregation and inequality (Grengs, 2005), further “splintering” the urban landscape (S. Graham & Marvin, 2001). Furthermore, financing investment in high-cost road and rail infrastructure by risk-prone public-private partnerships has become a legitimate *modus operandi* of transport authorities (Willoughby, 2013; cf. Houghton & McManus, 2012).

At the same time, a variety of practices in the field of urban transport claim to offer an “alternative” approach in terms of how transport is developed, what purposes it serves, and what outcomes it generates. A plethora of such practices focus on proposing an “alternative” to car-based mobility as a “mainstream” mode of transport that is particularly harmful to urban society, space and environment. They explore different ways of restricting urban access with respect to the motorised private vehicles: a broad notion that translates into a variety of specific policy and planning measures, such as the reduction of the capacity of urban arterial roads (Clegg, 2007; Goodwin, Hass-Klau, & Cairns, 1998), implementation of restrictive car parking schemes (Marsden, 2006; Verhoef, Nijkamp, & Rietveld, 1995), and congestion charging (Börjesson & Kristoffersson, 2018; Raux, Souche, & Pons, 2012; Rotaris, Danielis, Marcucci, & Massiani, 2010). Car-based mobility is also allegedly challenged and “punctured” (Kent & Dowling, 2013) by practices inspired by the “sharing economy” such as bicycle sharing (DeMaio, 2009; cf. Médard de Chardon, 2016; Médard de Chardon, Caruso, & Thomas, 2017) and car sharing (Fellows & Pitfield, 2000; Katzev, 2003)—the latter related to the growing industry of automated passenger vehicles (Cepolina & Farina, 2014; De La Fortelle et al., 2014). The commitment to fostering a shift from car to public transport, cycling and walking further underpins the proposal to integrate transport modes (Geerlings & Stead, 2003; A. D. May, Kelly, & Shepherd, 2006), and to popularise planning instruments such as park-and-ride facilities (Dijk & Parkhurst, 2014), car-free “pedestrian” zones (Hass-Klau, 1993), and shared spaces” (Hamilton-Baillie, 2008)—to name but a few practices from tackling automobility in the name of making cities “safe,” “sustainable,” “green” and “attractive” (Reigner, Brenac, & Hernandez, 2013).

At the same time, many “alternative” initiatives in urban transport seem to approach mobility as a vehicle for discussing broader patterns of ur-

ban development. Despite operating in very different local contexts, and being advocated and organised by diverse urban social movements, their message seems strikingly coherent. Whether protesting against the increase of public transport fares across Brazilian cities (Larrabure, 2016; Maricato, 2013; Santana & Silva, 2013; Verlinghieri & Venturini, 2017), opposing the construction of highway bridge in Istanbul (Voulvouli, 2011), or destroying urban light rail stations in East Jerusalem (Barghouti, 2009; Shlomo, 2017), a variety of citizen groups have formulated their transport-related demands in a wider context of political struggles for more democratic urban decision-making and appropriation of urban space. Their resistance against increasingly fragmented and non-democratic development of transport infrastructure and policy has perhaps become one of “emblematic quilting point[s] [representing] a desire for a fully-fledged transformation of the political structuring of life, against exclusive, oligarchic, and consensual governance” (Wilson & Swyngedouw, 2014, p. 3).

## **1.2. “Alternatives”: a problematic term**

The diversity of allegedly “alternative” practices and resistances in urban transport policy and planning means that several critical questions need to be raised with regard to their motivations, forms and outcomes.

Firstly, the notion of “alternative” appears too broad to constitute an effective analytical category. Put simply, the “alternative” label carried by the plethora of transport initiatives is too vague to reveal their actual content. This is not made easier by the fact that the meaning of the term “alternative” is constantly shifting: it depends on what and by whom is understood by “mainstream,” in a given time and urban context.

Secondly, while many of the practices listed above claim to offer a more progressive, inclusive and just approach to the way transport and policy infrastructure take shape, they are not impervious to forces of “alter-washing”, that is, attempts at institutionalising, hijacking or aligning them to the mainstream institutions and agendas. Many of the urban transport “alternatives” do not appear to be at odds with the entrepreneurial rationale. Their focus is often on increasing urban “liveability” and “life quality,” which is often presented as achievable through making cities more “green,” “smart,” “re-

silient”, “compact” and “sustainable”. While these concepts may often inspire genuinely progressive practices, they can nonetheless be embedded in place attractiveness strategies that are central to competition-oriented, entrepreneurial urbanism. Many allegedly “alternative” transport instruments are thus incorporated in portfolios of “policies-that-work” and “fast solutions” for “re-branding” and “re-imagining” the city (Wood, 2014c). A handful of cities are thus celebrated as “best practices” of ostensibly radically limiting the presence of cars in urban cores (e.g. Madrid, Oslo, Seoul), promoting cycling (Amsterdam, Copenhagen), re-introducing tramways to urban centres (Bordeaux, Strasbourg), and offering public transport services that are innovative (Bogota) and high-quality (Vienna).

One example of allegedly alternative policies that has become a world-famous “best practice” is bus rapid transit (BRT). Having originated in Bogota, BRT has “travelled” the world, introduced in a variety of contexts as a win-win solution to key local transport problems. Despite being ridden with contradictions and tensions (Montero, 2017a, 2017b; Rizzo, 2014; Wood, 2014b, 2014c, 2015), one of the reasons why BRT has gained popularity across cities and institutions might lie in its coherence with the entrepreneurial logic. BRT has been shown to function as a policy that “creates a market for bus service from large private companies where the government takes on the risk and brands the service as part of the city’s attempt to be a ‘world class’ city that can attract mobile capital” (Paget-Seekins, 2015, p. 115). Bicycle-sharing systems are another case of an apparently “alternative” urban transport solution. As analysed by Médard de Chardon (2016) and his colleagues (2017), although bicycle-sharing is widely presented and discussed as way of promoting cycling and decreasing the use of cars in cities, the actual goal of the policy might reside in its link to urban renewal programmes and “policy boosterism” (McCann, 2013), which targets skilled middle-class while disenfranchising the impoverished.

Thirdly and finally, many transport “alternatives” seem to centre upon the challenge of curbing car-based mobility, which they identify as the fundamental problem in contemporary urban transport, and one of most “radical” solutions available to urban planners and politicians, often discussed in “urban” sections of international media outlets such as *Business Insider* (Garfield, 2017), *The Economist* (Kuper, 2017) and *The Guardian* (O’Sullivan, 2014). Indeed, it has been well demonstrated that limiting the use of cars

makes a tangible effect on the quality of urban environment, as evidenced by measurements of air quality, noise pollution, road safety, the number of pedestrians, or the proportion of people who do decide not to use the car (Int Panis, Bastiaens, Botteldooren, De Nocker, & Immers, 2005; Litman, 1999; Lopez-Ruiz, Christidis, Demirel, & Kompil, 2013). However, as this approach appears to be focused primarily on issues of mobility patterns and urban design—interested *inter alia* in how particular transport “alternatives” can limit car traffic and increase the modal share of public transport, cycling and walking—it is much less concerned with urban dynamics into which its practices enter, and which they inevitably affect. Consequently, there is more attention given to the outcome that transport policies and projects may produce in terms of mobility, than in terms of broader implications on urban economic, social and spatial contexts in which they are implemented.

As demonstrated by Reigner and her colleagues (2009, 2013), bracketing these reflections may result in failing to identify and address the many structural causes for mobility-related problems. Detached from profound political and social analysis, the transport debate tends to focus on developing technological and behavioural “fixes” to deeply political problems. Furthermore, its spatial embedding is often weak, as “radical” anti-car measures in urban cores “saved” from traffic do not contradict simultaneous investment in car infrastructure in urban peripheries. Exemplary in this regard is the particularly influential work of Jan Gehl (2010), an urban planner and architect who analyses and develops mobility measures supposedly contributing to the creation of “liveable” spaces and “cities for people”—in utter disregard for various socio-economic results that these “ready-made” models may produce in different urban contexts. Another consequence of this approach is the focus on individuals as both the source of fundamental mobility-related problems, and the solution to address them. This perspective often incorporates a deeply revanchist, moral geography of “good” and “bad” behaviours and lifestyles, for instance by praising cyclists, pedestrians and inhabitants of neighbourhoods located in urban cores, while berating car users and suburbanites. The resultant pedagogical exercise in teaching “good” behaviour—and, by extension, raising “good” citizens—largely ignores the political economic causes behind the choice of travel mode and residential location (Reigner, 2016). In the case of many transport instruments the “urban question” that underpins them is thus often reduced to the challenge of “successful” technocratic management, achieved within the context of free market

capitalism, in an a-political process of governance relying on coalition building and participation of “stakeholders”—largely in tune with the urban entrepreneurial hegemony.

Therefore, I argue that to challenge urban entrepreneurialism in transport means to incorporate an explicitly critical urban dimension in the analysis of transport policies. Without this perspective, the potential of transport instruments to constitute a veritable “alternative” to the ills of entrepreneurialism cannot be effectively assessed and enhanced. This change of approach could involve posing an entirely different set of questions about transport measures—inquiring into their capacity to focus on the entirety of urban territory and all of urban citizenry, to address directly the issues of social inequality and well-being, and to connect to broader political struggles. Put simply, there is a need for connecting transport with the urban, and to explore the embeddedness of transport instruments in urban contexts.

## **2. Towards a research question**

### **2.1. How are transport policies urban?**

Attempting to seal the gap between transport studies and critical urban studies involves confronting a twofold problem. On the one hand, the majority of urban scholars do not partake in transport-related debates, and do not demonstrate a particularly strong interest in transport, a field that is perceived to be engaged in deeply technical, rather than spatial and political conversations, dominated by transport engineers and practitioners. Naturally, there exist notable exceptions to this rule. A growing number of urban researchers—in particular urban and political geographers—have inquired into transport. They build on a long-standing geographical interest in analysing the relation between infrastructural development and socio-spatial distribution of public services (Harvey, 1973; Smith, 1984; Soja, 2010). This literature looks into governance arrangements and elite coalitions behind transport development agendas (Jonas, Goetz, & Bhattacharjee, 2014), showing how

they are the focus of conflicting interests and contestations, as “transport policy divides political parties, social classes, and neighbour-hoods” (Batterbury, 2003, p. 152). Exploring how transport is embedded in urban power relations and regulatory frameworks is related to studying how its agendas are influenced by neoliberalisation. A number of urban scholars have thus demonstrated how transport may act as a tool of divisive metropolitan politics by (re)producing uneven spatial development (Addie, 2013, 2015; Enright, 2013, 2015, 2016; Farmer, 2011; Keil & Young, 2008; Low, 2013) or—inversely—how it can tackle spatial segregation (Rokem & Vaughan, 2017). This literature has also discussed how pro-growth and market-driven regimes can change the role of public transport, as it is increasingly conceptualised not as public service, but as entrepreneurial tool and asset in inter-urban competition for capital (Farmer, 2011; Grengs, 2005).

On the other hand, most transport researchers appear to be disconnected from key debates in critical urban studies, as technical, economic and behavioural perspectives on transport-related challenges continue to be dominant in the field. Again, however, important exceptions have to be identified, as there is a growing number of transport scholars who share their interests and preoccupations with urban researchers. Examples of this joint “critical” attention to urban aspects of transport instruments can be found in research about transport-related (in)equality, analysed from the perspective of transport geography (Ahmed, Lu, & Ye, 2008; Lucas, 2012; Lucas, van Wee, & Maat, 2016; Pereira, Schwanen, & Banister, 2017; Van Wee & Geurs, 2011; Welch, 2013) and mobilities (Ohnmacht, Maksim, & Bergman, 2009; Söderström, Randeria, Ruedin, D’Amato, & Panese, 2013). Transport researchers have also profoundly explored the topics of transport-induced inclusion and exclusion (Bonsall & Kelly, 2005; Casas & Delmelle, 2014; Church, Frost, & Sullivan, 2000; J. Farrington & Farrington, 2005; Hine, 2003; Kenyon, Lyons, & Rafferty, 2002; Lucas, 2012; Rajé, 2003; Schwanen et al., 2015; Stanley & Vella-Brodrick, 2009) and accessibility (Bocarejo & Oviedo, 2012; J. H. Farrington, 2007; J. Preston & Rajé, 2007; van Wee, 2016; Velaga, Beecroft, Nelson, Corsar, & Edwards, 2012). Somewhat less common are cases of transport-focused scholarship addressing explicitly political economy questions, for instance to demonstrate how transport policies and practices are underpinned by regulatory frameworks (Aldred, 2012; Baeten, 2000; D. Hall, 2010; Henderson, 2004; Røe, 2000; Schwanen, Banister, & Anable, 2011), power relations and norms (Butcher, 2011; D. Hall, 2004; Levy,

2013; Timms, Tight, & Watling, 2014), not least with regard to questions of race and ethnicity (Golub, Marcantonio, & Sanchez, 2013; V. Preston & McLafferty, 2016; Sanchez, 2008; Steinbach, Green, Datta, & Edwards, 2011; Sultana, 2005). A particularly fruitful debate have been encouraged by feminist transport geographers. Departing from a gendered analysis of homework relationship as one of the “cornerstones” of urban geography and political economy (Hanson & Pratt, 1988, 1995), they have established a field that scrutinises how gender determines particular transport practices, policies and how it structures power relations underpinning transport agendas (Bagheri, 2017; Buiten, 2007; D. Hall, 2004; Hanson, 2010; Kwan, 1999; Law, 1999; Levy, 2013; Parks, 2016; Uteng & Cresswell, 2008). In fact, in many respects, “critical” thinking about transport has feminist roots.

In spite of these numerous “critical” attempts at incorporating urban perspectives in examining transport policies and instruments, and inquiring into them by posing political economy questions, this type of research remains exceptional. Inquiries into transport continue to reflect a historical divide between qualitative and quantitative geography (Hanson, 2000). Even though there have been attempts to bridge it (Goetz, Vowles, & Tierney, 2009; Kwan & Schwanen, 2009), and certainly not all geographers employing quantitative methods are un-critical (Dobruszkes & Marissal, 2002), transport geography remains “a sub-discipline that has always struggled with moving beyond the quantitative revolution of the 1960s” (Schwanen, 2017, p. 357).” The resultant limitations in terms of how transport geography perceives the object of its research could be addressed by strengthening its link with critical urban studies, which remains weak and under-theorised.

The primary objective of this dissertation is therefore to strengthen the connection between the two disciplines by analysing and demonstrating **how transport policies are urban**—a question that guided by this dissertation in its first stages. Discussing this issue involves developing a framework for studying how transport is underpinned by questions of urban governance, coalition and regime building; whose stake and interests are addressed by particular transport policies and practices; how transport is central to both urban entrepreneurialism and resistances against entrepreneurial logics; what role it plays in territorial competitiveness; how it can be explored through questions related to labour and citizen participation, and highlighting the role of its workers and users.

## 2.2. Other research pathways

Several existing pathways towards addressing these questions can be identified at this point. First, at the forefront of contributions towards bridging the gap between transport studies and critical urban studies are conceptualisations of transport as contributor to “sustainable” development (Baeten, 2000; Low & Gleeson, 2003; A. D. May, 2013; Walton & Farrington, 2000). Heralding a transition towards a “sustainable mobility paradigm” (Banister, 2005, 2008, 2011a, 2011b; Banister & Hickman, 2013; Tight et al., 2011), this perspective proposes to design large, dense (“proximity-based”), and “mixed-use” cities. This is to be achieved by establishing stronger links between land-use and transport policy and thereby helping to reduce the number, scale, and length of journeys through limiting distances between activities and functions. Sustainable transport is thus envisioned as “an essential element in city viability, vibrancy, and vitality” (Banister, 2011b, p. 953), that is both “attractive and affordable” (Banister, 2008, p. 75). It constitutes the key component of the “good city” (A. Jacobs, 2011) not only economically performing but also socially cohesive and diverse, environmentally friendly, healthy, and participative.

It is important to acknowledge that the notions of “sustainability” or “sustainable development” are in fact heterogenous, and embrace a spectrum of positions and claims. On the one side of this spectrum, as conceptualised by Bailey and Wilson (2009), stands the framing of “sustainability” as mere adjustment of current socio-economic paradigm of advanced capitalism. It follows a strong double belief: not only in high compatibility of economic growth with environmental protection, but also in the actual strength of economic incentive and competitiveness stimulated by free market in terms of developing technological innovations that can facilitate a shift towards “green growth”. This “neoliberal technocentric” version of sustainability thus proposes an “ecological modernisation” (Barry, 2003) of capitalism as a sufficient strategy for dealing with socio-environmental challenges such as climate change. On the other side of the spectrum are located scholars and practitioners that have conceptualised the term as a question of creating not (only) economic, but also social and behavioural (personal) incentives for responding to environmental problems. These “various ‘resistance’ movements based around deeper-green ideologies (survivalism, green romanticism, and green radicalism)” (Bailey & Wilson, 2009, p. 2328) propose

a “radical ecocentric” vision of sustainability.<sup>1</sup> It does not simply act as a framework for adjusting current socio-economic structures, but delineates a pathway for radically challenging and transforming them. This proposal further chimes with the understanding of sustainable development advanced by environmental and political geographers (Mansfield, 2008). In this sense, the “ecocentric” outlook on sustainability could be seen as partly in tune with “critical” perspectives on transport discussed below, as it envisions a shift towards a different economic and social paradigm (P. A. Hall, 1993), conceptualised by the “transition theory” (Hopkins, 2008; P. Martens & Rotmans, 2002; Pavlinek & Pickles, 2000)<sup>2</sup> and described *inter alia* by the framework of “multi-level perspective” (Geels, 2011, 2012; Geels, Sovacool, Schwanen & Sorrell, 2017).

However, important questions need to be raised about the political dimension of “ecocentric” thinking about sustainability, and—to focus back on the particular field of transport and mobility—its potential in terms of recognising and addressing power relations that underpin broad transport agendas and specific transport practices. Despite its emphasis on complementing the predominant “technocentric” focus with behavioural solutions to environmental problems, it approaches transitions towards more sustainable socio-economic systems as an essentially consensual, and does not appear to be committed to addressing head-on the political (and therefore conflictual) dimensions of paradigmatic shifts across social classes, and across space. In relation to transport, this means that while the “techno-centric”/“weak”

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<sup>1</sup> These two (somewhat extreme) outlooks on sustainability can also be formulated as “strong” and “weak” versions of sustainability. While the former is understood as “the requirement to keep capital intact” the latter stands for “the requirement to keep natural capital intact” (Holland, 1997, p. 119). However, I chose not to emphasise this juxtaposition as it has been a subject of heated academic debates (Beckerman, 1994, 1995; Holland, 1997; cf. Daly, 1995; Hediger (1999), Gibbs, Longhurst & Braithwaite, 1998) and harsh critiques, according to which “no distinction of any substance can be drawn between weak and strong sustainability” (Holland, 1997, p. 119).

<sup>2</sup> Furthermore, as shown by the analysis of how different perspectives on urban transport “resound” within transport agendas of particular transport-related stakeholders in Brussels (see Chapter 2, and parts of Chapter 3), I argue that the way urban actors position themselves in the above-described spectrum is historically- and geographically-specific, and does not seem to directly relate to their official status (e.g. academics, policy-makers and transport experts, urban activists or “non-expert” inhabitants and transport users). Put simply, supposedly “radical” urban movements can advocate largely “technocratic” visions of sustainability, and, vice versa, left-leaning policy-makers may employ the label of “sustainability” to address profoundly political questions related to the socio-spatial unevenness of transport and mobility in Brussels.

version of sustainability has been identified to denote a better use of existing resources (through technological development), the “ecocentric”/“strong” framing of sustainability involves a reduction of their use altogether (which likely involves a reduction of overall mobility levels) (Banister, 2005). However, both perspectives are predicated on maintaining economic growth, and say relatively little about the social and political facets of transitions towards sustainable transport.<sup>3</sup> Consequently, even “strongest” and the most “radical” framings of sustainability do not appear to offer particularly relevant frameworks for exploring—essentially political economic—questions concerning how capitalist relations underpin specific agendas, policies and practices, not least related to urban transport. Although the “radical” view of sustainability may well break with purely economic perspectives on mobility by embracing a wider spectrum of environmental and social challenges, it remains largely focused on technical and behavioural, rather than explicitly political, social and spatial aspects of urban transport.

Furthermore, sustainable perspectives open the way towards conceptualising and studying urban aspects of transport through “big data” analyses embraced by the discourse of “smart city”. Yet research relying on “big data” not only seems aligned with entrepreneurial approaches, reducing the socio-spatial political conflicts embedded in mobility to technocratic challenges. It also poses the danger of “privileging of generality over particularity” (Schwanen, 2017), further disregarding the importance of local context. As further demonstrated by growing critical geographical work (M. Graham & Shelton, 2013; Kitchin & Lauriault, 2015; Kwan, 2016; Schwanen, 2017), urban transport research inspired by big-data tends to build on empirical evidence rather than comprehensive theory, and puts more trust in quantitative rather than qualitative data. However, particularly concerning is its aspiration in terms of developing models that not only aim at predicting travel behaviour (Simini, González, Maritan, & Barabási, 2012; Song, Qu, Blumm, & Barabasi, 2010), but also attempt to establish general rules of urban processes and structures (Louail et al., 2015; Roth, Kang, Batty, & Barthélemy, 2011). As further discussed by Kwan (2016) and Schwanen (2017), research underpinned and driven by big data paradoxically brings more uncertainty than clarity in terms of producing new knowledge about transport.

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<sup>3</sup> Exceptional in this regard remains the focus on “social sustainability” in transport (Manzi, Lucas, Lloyd-Jones & Allen, 2007; Lucas, Marsden, Brooks & Kimble, 2007).

Another pathway for exploring the link between transport studies and critical urban studies is highlighted by scholars contributing to the “new mobilities paradigm” (Sheller & Urry, 2006). Elevating the importance of mobility and its central (rather than exceptional) character in urban processes, mobilities “positioned [itself] more than once as stemming in part from transport geography’s inadequacy to render understandable contemporary transformations in the (non)movement of people, objects, ideas and so forth” (Schwanen, 2017, p. 126). Therefore, as demonstrated by Kwan & Schwanen (2016), this approach has stimulated a much needed reflection on the condition of the transport debate, in which it engages with many representatives of transport geography (Adey, Bissell, Hannam, Merriman, & Sheller, 2014; Cresswell, 2010a, 2012, 2014; Cresswell & Merriman, 2011; Hanson & Kwan, 2008; Merriman, 2015, 2016, 2017; Salazar & Jayaram, 2016; Söderström et al., 2013). However, the main interest here seems to be in exploring “representations and meanings of mobility” (Cresswell, 2010b, p. 19) as well as its sensations, experiences, practices and “micro-politics” (Bissell, 2016). Although Cresswell (2006, 2010b) focuses on politics of mobility as “the ways in which mobilities are both productive of such social relations and produced by them” (2010b, p. 21)—and identifies “force”, “speed,” “rhythm,” “route,” “experience,” and “friction” as themes around which the politics of mobility can be analysed—mobilities scholars do not appear particularly captivated by analysing political economy underpinnings of mobility, and the power dynamics that shape its particular instruments. However, as argued by Kwan & Schwanen (2016) and Hanson (2015), the dialogue with the mobility turn is both necessary and fruitful, and therefore the point here is not to articulate new cleavages between disciplines, but rather to identify and build bridges across disciplines and epistemological traditions to engage in “a conversation across dividing lines and uneven positions that is as open as possible” (Kwan & Schwanen, 2016, p. 246).

It is in this spirit that in this dissertation I propose to strengthen the connection between transport studies and critical urban studies by, on the one hand, building on emerging “critical” perspectives developed in transport geography and, on the other hand, the traditions of critical urban theory.

### 2.3. Critical urban theory as the link between transport and the urban

The relevance of critical urban theory for studying urban transport lies in its epistemological focus on political economy of the city, and its analytical approach to the city as a social and political construct. The origins of this approach could be traced back to Engels's seminal work on "*The Condition of the Working Class in England*" (2009 [1845]) and "*The Housing Question*" (2016 [1872]). At its heart lies Karl Marx's critique of political economy (2008 [1859]; 1992 [1867]). As argued by Brenner (2009), Marx

"understood [it] not only as a critique of ideas and discourses about capitalism, but as a critique of capitalism itself, and as a contribution to the effort to transcend it. In this dialectical conception, a key task of critique is to reveal the contradictions within the historically specific social totality formed by capitalism" (p. 199).

Its objective is therefore:

"to illuminate the landscape of ongoing and emergent sociopolitical struggles [and to act] as a means to explore, both in theory and in practice, the possibility of forging alternatives to capitalism." (Brenner, 2009, p. 200)

As further explored by Brenner, critical urban theory builds on the work of the Frankfurt School of social philosophy, whose representatives explored of the concept of critique as question of both epistemological (Horkheimer, 1982 [1937]; Adorno et al., 1976; Habermas, 1970 [1968, 1969], 1973 [1968, 1971]) and political nature (H. Marcuse, 1962), thus disputing the predominantly positivist and technocratic character of social science. Applying this work to analyse processes of urban change was further stimulated by the dissatisfaction with human ecology approaches developed by the Chicago School (C. Harris & Ullman, 1945; Park, 1939; Park, Burgess, & McKenzie, 1925), which at that time provided the dominant lens for urban scholarship. According to human ecologists, the city functioned as a natural-like organism in which different categories of free and rational users "struggled for space", following free market "laws" governing the spatial distribution of urban populations and functions. This approach claimed the capacity to model and predict urban development, and to design an optimal socio-spatial configura-

tion in a given city, yet its epistemology was largely descriptive, naturalistic, technocratic and a-political, and strongly reliant on quantitative methods.

Against the background of the political turmoil of the 1960s—which saw the rise or culmination of a plethora of social and political movements related to anti-colonial struggles across the so-called “third world”, anti-war protests and the civil rights movements in the United States, the Prague Spring, and the May 1968 protests in France (Rossi, 2018)—the limits of ecological functionalism were exposed by activists (J. Jacobs, 1961) and intellectuals such as Henri Lefebvre (1996 [1968], 1991 [1974], 2003 [1970]), Manuel Castells (1977 [1972]) and David Harvey (1973, 1978), whose path-breaking interventions directly referred to Marx’s critique of political economy.

Despite many differences in their approaches, these scholars—and a plethora of their followers within the increasingly pluralised and globalised field of critical geography (Rossi, 2018)—have shared a fundamental recognition of the dialectic relationship between the social and spatial order, and between capitalism and urbanisation. As city is central to economic production, circulation and consumption, specific regimes of capital circulation and accumulation result in and hinge upon specific socio-spatial configurations and forms. This means that urban space and society do not arise from “natural” processes or “laws”. Instead, they are socially and politically produced by multiple social actors, and hence reflect social relations of domination and power, and are subject to regulation and control. Therefore, this approach:

“rejects inherited disciplinary divisions of labour and statist, technocratic, market-driven and market-oriented forms of urban knowledge [...] Rather than affirming the current condition of cities as the expression of transhistorical laws of social organization, bureaucratic rationality or economic efficiency, critical urban theory emphasizes the politically and ideologically mediated, socially contested and therefore malleable character of urban space—that is, its continual (re)construction as a site, medium and outcome of historically specific relations of social power” (Brenner, 2009, p. 198)

As a social construct, the city is a stake, shaped among a range of social actors whose power, interests and aspirations are not the same or even, Consequently, urban space reflects and produces uneven power relations, but also allows to contest and transform them, to solidify or to challenge the existing socio-political configurations of power. Furthermore, any critique of

thus theorised dialectic relationship between society and space, and between city and capitalism, is contextually embedded, as it is subject to historical and geographical specificities. Thus, as synthesised by Brenner and his colleagues (2009):

“In the most general terms, critical approaches to urban studies are concerned:

- (a) to analyze the systemic, yet historically specific, intersections between capitalism and urbanization processes;
- (b) to examine the changing balance of social forces, power relations, sociospatial inequalities and political-institutional arrangements that shape, and are in turn shaped by, the evolution of capitalist urbanization;
- (c) to expose the marginalizations, exclusions and injustices (whether of class, ethnicity, ‘race’, gender, sexuality, nationality or otherwise) that are inscribed and naturalized within existing urban configurations;
- (d) to decipher the contradictions, crisis tendencies and lines of potential or actual conflict within contemporary cities, and on this basis,
- (e) to demarcate and to politicize the strategically essential possibilities for more progressive, socially just, emancipatory and sustainable formations of urban life.” (p. 179)

This synthesis serves as a mission statement that is adopted throughout this dissertation in its attempt to consolidate and contribute to what it identifies as emerging “critical” approaches to urban transport highlighted above. In the context of this motivation, the term “critical” acquires at least three meanings, implying different sets of questions.

First, developing a critical perspective on urban transport means exploring transport policies as *urban* policies, and analysing transport by confronting central issues in critical urban studies, rather than as transport instruments that simply happen to be implemented in cities.

Second, it means analysing cities through the lens of particular *transport* policies implemented in their territories, detecting urban issues in transport policies, and thinking about transport as an inherently urban, rather than technical question. This conceptualisation further entails asking a series of political economy questions about urban transport. These questions allow to acknowledge territorialisation and geographical variegation of urban transport while studying what actors, interests and motivations are involved in and excluded from conception and implementation of particular urban

transport instruments, policies and agendas. They observe how urban transport reflects power-relations between urban actors, and how it is embedded in urban regimes and broad agendas of urban development. They also analyse the capacity of urban transport in terms of reproducing or resisting socio-spatial inequalities and exclusions and inquire into the role that urban transport plays in political–institutional arrangements that shape the production of urban space.

Third, developing a critical perspective on urban transport means analysing it as a potential vehicle of urban change. This approach builds on critical urban theory’s attention to the emancipatory potential of urban society. It is particularly visible in the writings of Henri Lefebvre, whose conceptualisation of “the right to the city” ([1968] 1996) (discussed in the Section 4 below) underpins the theoretical framework for critical analysis of urban transport introduced in this dissertation. The urban is understood here as a metaphor of space in which future, “alternative” projects can emerge within the capitalist world, empowering its inhabitants and opening new horizons.

Therefore, analysing and understanding of political economic structures underpinning urban policies—including those related to the field of transport—is key for critically reflecting upon, challenging and changing these very structures. Consequently, one of key ambitions of the critical perspective on urban transport is to highlight pathways towards a transformation of existing socio-spatial configurations by remaining “focused on the disjuncture between the actual and the possible” (Brenner, 2009, p. 201). This explicitly normative approach directly relates to Lefebvre’s method of transduction that “constructs a theoretical object, a possible object from information related to reality and a problematic posed by this reality” (1996 [1968], p. 151).

The ambition to explore the possible connection between transport studies and critical urban theory thus leads to a more detailed formulation of the research question that is central to this this dissertation: **what makes transport policies part of urban political economy?**

This question will be addressed by developing a structured and dense framework for studying urban transport in a critical manner, as an element of urban reality, a transport device, and a harbinger of urban change—con-

tributing to and strengthening critical perspectives on urban transport. Thus conceptualised framework constitutes a departure from an inquiry into “alternatives” in urban transport to offer a more robust and productive, critical approach to studying and deconstructing a variety of urban transport policies and practices—including those carrying the “alternative” label, or ascribing to the “sustainable” perspective on transport, which appear to operate on the forefront of the contemporary transport debate.

### **3. Towards a framework for critical analysis of urban transport**

#### **3.1. The right to the city as an analytical heuristic**

My proposal is to build a framework for critical analysis of urban transport instruments, policies, and agendas by referring to the theory of “the right to the city” (RTTC). The object of this analysis—introduced in Section 5 below—is the policy of fare-free public transport (FFPT).

Henri Lefebvre’s ([1968] 1996) original call for “the right to the city” was formulated in the late 1960s as an expression of radical criticism of the then predominant Fordist-Keynesian mode of capitalist urbanisation and its associated functionalist paradigm of urban planning. This critique identifies transport planning, and in particular the development of car-oriented infrastructure as one of key tools of commodification of urban space, as “the invasion of the automobile and pressure of the automobile lobby [are] harmful to urban and social life (2003 [1970], p. 18). For Lefebvre, the ubiquitous character of urbanisation implied that urban issues should from now on constitute a key arena of opposition to capitalism. In Lefebvre’s eyes, while the urban “ferments, full of suspect activities, of deliquescence, a hotbed of agitation [...], [s]tate powers and powerful economic interests can think of only one strategy: to devalorize, degrade, destroy, urban society.” (Lefebvre, [1968] 1996, p. 128)” For Lefebvre, the city is at the centre of opposition to this crisis, as locus of an opportunity “to go beyond the market, the law of ex-

change value, money and profit” (*Op. cit.*, p. 124). The most notable subject of Lefebvre’s critique is thus the prioritisation of exchange value over use value in the definition and conduct of urban policies, leading to a widespread commodification and fragmentation of urban life.

Accordingly, following Lefebvre, the essence of any urban theory or policy claiming a genuinely “alternative” character would lie in foregrounding the use value of urban space to the detriment of exchange values, that is, to impose the needs and aspirations of (present and future) city’s inhabitants over the capitalist interests of land/ property owners, developers and entrepreneurs—whether the latter are private or public entities. “The urban” is therefore approached here as a metaphor for contemporary capitalist relations.

On this ground, Lefebvre urged to enunciate a new right—“the right to the city”. His point was not to advocate another addition to the list of existing liberal-democratic rights, but to delineate a strategy dedicated to transfer power over the appropriation and production of urban space out from the market’s and state’s hands, to those of inhabitants (Purcell, 2002, 2014), hence introducing politics of self-management (“*autogestion*”) of the city by and for its citizenry. This new right should act as:

“[...] a transformed and renewed right to urban life [in which] the ‘urban’, place of encounter, priority of use value, inscription in space of a time [are] promoted to the rank of a supreme resource among all resources” (Lefebvre [1968] 1996, p. 158).

For Lefebvre, as well as for a number of academics engaged in the ongoing debate about the RTTC, (Brenner, Marcuse, & Mayer, 2009; Harvey, 2012), the process of change called for by this theoretical formulation cannot be considered outside the realm of existing and situated—hence contingent—urban struggles. Looking for a ready-made “recipe” to implement the right to the city *hic et nunc*—designed beforehand and “once and for all”—would be vain and pointless. Instead, the precise content, form and direction of the RTTC have to be continuously (re)formulated and (re)examined in order to strengthen existing struggles.

Put simply, RTTC is as much a political slogan and political strategy, as a way of looking at the urban that, in Lefebvre’s eyes, “ferments, full of sus-

pect activities, of deliquesce, a hotbed of agitation” (Lefebvre, [1968] 1996, p. 128). In other words, RTTC is a framework that allows to critically analyse existing urban policies and practices. Its original intention, conceptualised in response to the rise of diverse bottom-up movements as a result of May 1968 protests, was also to strengthen urban practices in their struggle against commodification and domination of exchange value—an agenda that in contemporary cities persist under the auspices of urban entrepreneurialism—and to reclaim the power to control urban politics.

This is particularly salient as recent academic debates and policy initiatives have often diluted the transformative ambition of Lefebvre’s original call for an alternative mode of social production of urban space. Numerous scholars have interpreted it as dividable into separate rights adapted to a series of specific socio-economic aspects: right to housing, mobility, natural resources, aesthetics, education, or healthcare (Attoh, 2011). Cataloguing distinct rights has also been characteristic of the works of diverse international institutions such as Habitat International Coalition (*World Charter for the Right to the City*, 2004), the Council of Europe (*European Urban Charter II*, 2008), the United Nations (*European Charter for the Safeguarding of Human Rights in the City*, 2006), many municipal, national and federal governments<sup>4</sup> as well as a plethora of urban social movements (Mayer, 2009, 2012; Sugranyes & Mathivet, 2011). These divided interpretations further position the right to the city in the broader realm of human rights, and assume its individualistic character. This kind of approach greatly limits the potential of Lefebvre’s concept, for such inventories of individual claims address only “particular aspects of neoliberal policy” (Mayer, 2012, p. 75), hence losing sight of the systemic character of the critique and its commitment to enforce alternatives to existing power configurations.

However, in a number of recent re-interpretations, the RTTC has re-acquired a much broader sense. Peter Marcuse recognises it as a common “right to totality, a complexity” (2012, p. 35) that constitutes a fundamental demand for a new urban system. This demand consists of a set of interrelated elements geared towards the appropriation and production of urban space by its inhabitants, stretching far beyond the possibility for urban dwellers to

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<sup>4</sup> For municipal examples see *Charte montréalaise* (2007) and the Mexico City charter (Zárate, 2010). For a case concerning the national or federal scale see *The City Statute of Brazil* (2010).

physically occupy existing urban space (Mitchell, 2003). These interpretations challenge the existing configurations of power and are concerned with all aspects regarding the urban environment, shaping its social, political, built or aesthetic dimensions (Purcell, 2014). The concept of “city” is thus approached as “a synecdoche for society” as a whole (P. Marcuse, 2009, p. 244). Put this way, the RTTC also reaches beyond altering existing socio-spatial configurations and puts forward the need for “utopias of spatial form” (Harvey & Potter, 2009, p. 46). These core ingredients of the original formulation of the RTTC underline the analytical framework that underlines the empirical part of the dissertation.

The idea of using Lefebvre’s work to analyse specific urban policies is not entirely new (Belda-Miquel, Peris Blanes, & Frediani, 2016; Kęłowski & Van Criekingen, 2014), and has also been discussed in relation with transport (Attoh, 2011, 2012; Corsín Jiménez, 2014; Jouffe, 2010; Kusters, 2016; Levy, 2013; Scott, 2013; Verlinghieri & Venturini, 2017). However, in most cases RTTC has been referred to as a rallying call and symbolic slogan that has inspired actually existing transport projects or urban movements involved in the field of transport. Furthermore, this literature appears to rarely engage in close readings of Lefebvre’s texts, and instead seems to rely on their interpretations (e.g. de Souza, 2010; Harvey, 2008; Marcuse, 2012). It also approaches the RTTC as a right to something specific (Levy, 2013; Verlinghieri & Venturini, 2017), for instance “the right to mobility” that has been explored by literatures in mobilities (Cresswell, 2006; Golash-Boza & Menjívar, 2012; Hague, 2010; Stratford, 2016), communication and migration (Pécoud & De Guchteneire, 2006; Wellman & Cole, 2011), and information studies and ethics (Palm, 2013). Transport scholars thus often reduce Lefebvre’s rich and broad theory to “a right to access socioeconomic goods” (Attoh, 2012, p. 5). As interpreted by Verlinghieri & Venturini (2017, p. 2), “in this definition the right to the city includes the right to go to school, to go to the hospital, to access culture, social networks, places of decision-making.” As a result, the few RTTC-inspired analyses of urban transport develop arguments that seem far from Lefebvre’s original intentions, and have not yet proposed a dense and clear framework for analysing urban transport policies. Thus, the critical potential of RTTC in terms of analysing transport has not been realised so far.

Herein lies one of the key ambitions of this dissertation: to propose the RTTC as a critical analytical lens through which urban transport reality can

be seen, analysed, and—in an explicitly normative way—altered. My aim is not to discuss the RTTC as a right to anything specific, let alone “mobility” or “transport,” “a city” or “the city”, or any of its resources or spaces. Instead, in line with the original intention behind Lefebvre’s writings, and aware of the context in which the particular essay on the RTTC was written, my intention is to apply RTTC as a heuristic that inspires a variety of explicitly political economic questions that may be asked about diverse transport policies and practices, and thus directing research about transport into pathways overlooked by “mainstream” urban transport debate, for instance when engaged in the discussion about “sustainable” transport. As a result, I hope that the framework helps to strengthen what I identify as critical perspectives on urban transport. I argue that this approach allows to fully embrace the critical capacity of Lefebvre’s work in terms of developing an explicitly critical and urban lens that can enrich the understanding of apparently technical, rational and efficiency-driven transport policy models.

This framework is built on four pillars bringing out the core ingredients of the original formulation of RTTC, which are introduced in the remainder of this section. The framework is further complemented by theoretical insights provided by literatures on citizen participation, urban regimes and transport justice, which will be discussed in Section 3.2. below. A table presented in Section 4.1. summarises how these elements together nourish a series of questions which will be asked about the policy of FFPT in the empirical part of the dissertation.

The first pillar regards the question of *participation*: it inspires an inquiry into the capacity of transport instruments to advocate citizen participation in framing transport policies and practices, and consequently to enable inhabitants to appropriate and produce of urban space. This is perhaps the most obvious and common way of understanding the RTTC, reading it as a call for empowering inhabitants vis-à-vis the market and the state.

However, Lefebvre’s proposal was certainly not limited to partaking in how the physical dimension of urban space is physically created and designed—a misinterpretation that is quite common among urban social movements and academics alike (Mitchell, 2003)—or joining the existing political bodies and institutions where urban policies and agendas are made. Participation in how space is appropriated has to involve a challenge to exist-

ing power relations, and should effectively work towards changing them. As throughout the dissertation power is conceptualised by the notion of “urban regime” (further discussed in Section 3.2.2. below), what the RTTC outlines is taking *power* away from politics of urban regimes towards politics of the inhabitants. This is the second core element of the framework, which helps to scrutinise the capacity of transport practices in terms of revealing and challenging urban regimes.

Key in this regard is the recognition of the political dimension of urban development, not least in the particular domain of transport. My understanding of the term “political” derives from the work of Chantal Mouffe, Erik Swyngedouw and Slavoj Žižek, who build on contributions by Alain Badiou and Jacques Rancière. The definition of “the political” is perhaps best explained in relation to “politics”, as explained by Mouffe in one of the opening passages of her seminal work, *On the Political*:

“[B]y ‘the political’ I mean the dimension of antagonism which I take to be constitutive of human societies, while by ‘politics’ I mean the set of practices and institutions through which an order is created, organising human coexistence in the context of conflictuality provided by the political.” [In this sense,] political issues are not mere technical issues to be solved by experts. Properly political questions always involve decisions which requires us to make a choice between conflicting alternatives” (2005, p. 9–10).<sup>5</sup>

The hiding of this “conflictuality”, and the resultant nullification of the political leads to a “post-political condition.” In the words of Slavoj Žižek, this condition occurs as

“the conflict of global ideological visions embodied in different parties who compete for power is replaced by a collaboration of enlightened technocrats (economists, public opinion specialists...) and liberal multiculturalists; via the process of negotiation of interests, a compromise is reached in the guise of a more or less universal consensus. The political (the space of litigation in which the excluded can protest the wrong/injustice done to them), [thus becomes] foreclosed” (2006, p. 72).

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<sup>5</sup> Building on Mouffe’s claim that the “incapacity to think politically to a great extent due to the uncontested hegemony of liberalism” (*Op cit.*, p. 10), one could argue that the lack of the political dimension in thinking about urban transport may derive from (and contributes to) the hegemony of what I later conceptualise as “neoclassical” and “sustainable” perspectives on transport.

Narrating social challenges while detaching them from their political dimension has become increasingly common in the domain of urban policy-making, partly as a result a result of the re-scaling of State that began in Western Europe and North America in 1970s. Although the departure from top-down State-led government over urban development supposedly opened up urban politics to a plurality of actors, multi-actor governance configurations have been demonstrated to consistently limit the amount of choices regarding urban agendas, policies and practices (Wilson & Swyngedouw, 2014). Thus, in the “post-political city” (Swyngedouw, 2007), these choices are often discussed as consensual and a-political, providing little or no space for actual disagreement or dissent with broad principles of urban development and its particular instruments or projects it involves. In other words, “policy-making is not only [...] predicated on the elimination of dissent, but more importantly, forecloses the political, [...] and] through that, produces what Rancière and others define as a post-political and post-democratic constitution” (*Op. cit.*, p. 60),

Emphasising the political dimension of urban transport, and taking power over how its agendas and priorities are defined, demands placing it a wider urban context, or what Lefebvre would probably refer to as “urban totality” (Marcuse, 2012, p. 35). Challenging power relations related to urban transport requires incorporating a perspective that focuses beyond questions and facts related to traffic and movement. Therefore, the third pillar of the framework I intend to build highlights the importance of investigating the extent to which transport policies may relate to and challenge broader agendas of urban development and governance. This constitutes a proposal to shift the analytical lens *beyond mobility* to grasp the relationship between transport and urban development writ large.

The fourth and final element of the framework attempts to capture an essential element of Lefebvre’s philosophy—the conviction that any revolutionary movement attempting to alter urban power relations cannot define and end goal, or an optimal configuration of power, society or space. Therefore, it is important to to analyse to what extent particular transport practices can act as harbingers of an “urgent *utopia*”<sup>6</sup> *on the horizon* of possibility (Purcell, 2013, 2014). Instead of seeking blueprints and “fixes” of “fast” policy-making (Marsden & Stead, 2011), the RTTC perspective offers to look at

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<sup>6</sup> Own emphasis.

transport instruments as potential elements of a long-term, deep and utopian strategy that reaches beyond existing socio-spatial configurations.

### **3.2. Secondary heuristics: citizen participation, urban regimes and transport justice**

While the theory of the RTTC functions as the main heuristic underpinning the framework, it is further completed by several secondary conceptualisations. The exploration of questions related to participation is supported by insights coming from the literature on citizen participation in urban policy-making and planning. The inquiry into the questions of power is further supported by the literature on urban regimes and elite coalitions on the one hand, and the recently-emerged conceptualisation of transport justice on the other.

#### **3.2.1. Citizen participation**

Given the strategic centrality of users and use values of urban space in Lefebvre's philosophy, genuine involvement of inhabitants in policy decisions—nowadays baptised “citizen participation”—is undoubtedly a key and necessary component in any possible operationalisation of the right to the city. However, as Lefebvre anticipated it, experiences of citizens' participation in urban policy-making have now proven to entail highly controversial practices in many different urban contexts. This has even brought some scholars to conclude that participation is “entirely appropriate to the neoliberal age” (Pearce, 2010, p. 14), or, more subtly, that urban entrepreneurial agendas are prone to harness citizens' participation in “thinly veiled attempts at securing legitimacy for and cooperation with policies already adopted that favour capitalist growth” (Silver, Scott, & Kazepov, 2010; see also Huisman, 2014).

These concerns are largely reflected by the way in which citizen participation is framed by transport scholars. It is a body of work that has looked into how non-expert inhabitants and users of transport systems can be involved in transport policies. However, participatory processes in transport have been predominantly approached as tools for enhancing the legitimacy and building acceptability of particular transport solutions as well as broader

policies and agendas, to which non-expert inhabitants are to be convinced (Epprecht, von Wirth, Stünzi, & Blumer, 2014; Isaksson & Richardson, 2009; Sagaris, 2014a). To this end, transport scholars have compared various participatory instruments (Stewart, 2017; Wahl, 2013), yet the transport debate seems to have paid little attention to the social and political dynamics that underpin these techniques.

A much larger and somewhat critical literature has explored transport-related community activism around transport planning (McAndrews & Marcus, 2015; Staeheli & Thompson, 1997), and in particular the way that urban social movements mobilise around transport questions and projects (Aldred, 2012; Barghouti, 2009; Batterbury, 2003; Grengs, 2002; Larrabure, 2016; Maricato, 2013; Rawcliffe, 1995; Sagaris, 2014b; Vasconcellos, 2001; Verlinghieri & Venturini, 2017; Vigar, 2013; Voulvouli, 2011)—harking back to Castells' (1983) recognition of how citizen movements can emerge around struggles for equitable access for various urban goods, including transport.

Nonetheless, as observed by Legacy (2015), although “limiting civic participation in transport decision [results in] inhibiting citizens from challenging dominant urban transport discourses, [...] urban transport planning is weakly linked to progressive conceptions of participatory planning” (p. 2–3). To develop a more critical perspective on transport-related participation, and incorporate it to the RTTC-inspired framework, I refer to various contributions to the critical literature on citizen participation. This literature builds on Arnstein's (1969) seminal work to demonstrate that existing participatory frameworks often fail to recognise the unequal distribution of resources and capacities among actors, notably regarding their social and cultural capital, access to information, technical expertise, oratorical skills, and time availability (Silver, Scott & Kazepov, 2010). Accordingly, such frameworks often reproduce a class bias, since certain groups (e.g. the most informed, educated or organised) tend to participate more than others, and in different ways (e.g. men tend to assume managerial roles more frequently than women). Accordingly, critical scholarship emphasises that participatory schemes should effectively provide inclusive conditions for direct citizen involvement, that is, participation should be capable of reconciling the institutional/top-down and non-institutional/bottom-up forms of activity. On the one hand, participatory process cannot be engineered in a purely “top-down” fashion, regardless of urban social movements' and citizen groups' voices and exist-

ing know-how, and the context of previous participatory experiences (Martínez, 2011). Neither should it have an obligatory character, for citizens should have a right to consciously choose not to participate in a given format, as “non-participation is also participation” (Think Tank Niepartycypacja, 2012). On the other hand, the “bottom-up” approach of local participation must not be glorified, for it may enforce the creation of parochial spaces dominated by particular groups pushing forward excluding, NIMBY-ist claims.

Furthermore, to enable inhabitants to appropriate and produce urban space, participative practices should foster deliberation, but must not a priori force a consensus among participants. Rather, the expression of dissent is “the first condition of subsequent dialogue” (Sadura, 2012, p. 199). As Pretty (1995) points out, genuine participatory projects should therefore be interactive. In other words, participation should be approached “as a right, not just the means” (p. 1252), and engage participants in a mutual learning experience.

These aspects are essential to enable participation to have a redistributive character. At stake here is the capacity for city-dwellers involved in the participatory scheme to challenge the existing configurations of power directing the production of urban space. Hence, participatory schemes should not be created for, but directly co-created with and by city-dwellers (Malewski, 2012)—regardless of their legal, economic or social status. In other words, instead of a “representative” function (i.e. providing no more than a voice for the citizens), an “instrumental” one (i.e. providing means of increasing efficiency of pre-established policy schemes), or a “nominal” one (i.e. providing an instrument of display for some politicians), participation should have a “political” character (White, 1996).

Finally, to become concerned with all aspects regarding the urban environment and avoid parochialisms, participatory projects must acquire a holistic, multi-scalar dimension, reflecting on the whole city and – even beyond it – the whole society, that is, reaching beyond administrative boundaries and parochial spaces or interests. Participation should thereby become both effective and transformative: produce tangible, though unforced results, that contribute to a genuine transformation of the urban realm, and a lasting

change of power relations that reaches beyond existing institutional frameworks.

### 3.2.2. Urban regimes and elite coalitions

The RTTC-inspired inquiry into the question of *power* underpinning transport policies employs the concepts of urban regime and elite coalitions as useful proxies for understanding the processes of conceiving, developing and implementing transport policies, and revealing how they may enter and alter local power relations. Urban regime is thus the main lens through which power is conceptualised and observed throughout the dissertation.

The concept of urban regime emerged from the “community power debate” that throughout the 1950s and 1960s engaged elitist and pluralist approaches in discussing the question of who governs the city (Dahl, 1961; Hunter, 1953). Seminal work by Elkin (1985, 1987) and C. N. Stone (1989, 1993) challenged this inquiry by shifting it towards the question of how power is created, assembled and enacted. They argued that power over urban policy-making is not simply obtained and controlled, for instance by winning an open election or holding a public office. Instead, power is relational, produced and sustained among a variety of governmental (elected) and non-governmental (unelected) urban actors, whose capacity to govern is something that is being constantly achieved and reaffirmed. This capacity constitutes the power *to* develop and execute policy rather than the power *over* particular institutions or territories. In turn, power can be detected by studying urban regimes, which C. N. Stone defines as “informal arrangements by which public bodies and private interests function together in order to be able to make and carry out governing decisions” (1989, p. 6). These “growth coalitions” (Molotch, 1976) built around common political motivations and interests continuously produce and reaffirm the power to make urban policy.

Although urban regime theory is well-established in critical urban geography and critical urban studies, it has not been explicitly embraced by research into transport policy. However, there exists strong evidence suggesting that processes identified by C. N. Stone underpin the way in transport agendas are framed and subsequently translated into infrastructural projects (Zitouni & Tellier, 2013), as building coalitions among local elites appears to

be essential for the planning of a metropolitan transport network (Enright, 2016), or implementation of bus rapid transit (Wood, 2014b).

While there is a variety of considerations that emerge from the urban regime theory, its particular relevance for the argument developed in this dissertation, and for the analysis of urban transport policies, resides in its acknowledgement of how the power to make policy ultimately resides within coalitions of elites. In turn, this recognition raises the question about what kind of interests are represented by transport policies, and how the process of their conception and development involves and represents “non-expert” and non-elite citizens—a question which appears to have rarely investigated in relation to transport policies. Urban regime theory further emphasises the plurality of actors, motivations and interests involved in urban policy-making—including in the field of transport—and the resultant plurality of the process of consolidating and reproducing power. As argued by P. Marcuse & Van Kempen (2000), “[t]he city’ is not an actor; it is a place occupied and used by many actors. A city does not prosper or decline, particular groups in it do it, and generally in very different fashion” (p. 265). This recognition is particularly relevant in the context of the shift of the locus of policy-making away from the state institutions constituting the “government” towards “governance” of new configuration of actors and spaces. This process has been demonstrated to hinge on de-politicisation of politics, and is particularly visible and salient on the urban scale (Swyngedouw, 2007), and has embraced the conception and implementation of transport agendas (Oosterlynck & Swyngedouw, 2010).

Consequently, urban regime theory may be a significant contribution to the re-politicisation of urban transport research. At the same time, it may also constitute a relevant approach for studying transport as an entry point for investigating urban regimes—thus responding to the main ambition of the dissertation: linking transport and the urban.

### **3.2.3. Transport justice**

To further explore the questions of *participation* and *power* underpinning transport, I use the recently-emerged notion of transport justice as one of key ways of conceptualising socio-spatial embeddedness of transport in-

struments. Analysed from the perspective of transport justice, FFPT could be understood as a potentially “just” policy, since reducing price to zero makes access to PT free and unconditional to all potential users, increasing the level of justice across the PT system.

However, the ongoing debate in transport geography about possible articulations and ways of measuring and studying justice (Beyazit, 2011; Golub & K. Martens, 2014; Gössling, 2016; K. Martens, 2006, 2017; Pereira, Schwanen & Banister, 2017) appears to be centred mostly on the outcomes produced by transport planning. Consequently, it reflects the predominant understanding of transport policies as measures that are first and foremost concerned with mobility patterns, in detachment from other aspects and domains of urban development, across territories and scales. Therefore, by exploring FFPT through the lens of transport justice I attempt to politicise this concept, and argue that attention has to be paid to how “just” transport measures are conceived, developed and implemented, reflecting David Harvey’s (1973) formulation of social justice as “the just distribution justly arrived at.” (p. 98)

## **4. Research design and methodology**

### **4.1. The research object and analytical framework**

The analytical lens provided by the theory of right to the city, and further complemented by the literatures about critical participation, urban regimes/elite collation and transport justice, translates into an analytical framework. The framework consists of analytical questions that explore the tension between urban and transport-related aspects of policies, and thus help to consolidate critical perspectives on urban transport.

The object of the research presented in the dissertation is the policy of abolishing fares in public transport (PT), here referred to as “fare-free public transport” (FFPT)—a choice further explained in Section 5.2. Although full

## CHAPTER 1: INTRODUCTION



*Figure 1.* The outside and inside of fare-free public transport vehicles in Tallinn, Aubagne and Chengdu (from left to right). On the surface, fare abolition does not appear to be a particularly visible, unique or diverse phenomenon. Although in Aubagne a “free bus” (“*bus gratuit*”) logo announces a ticket-free regime, fare-free networks in Tallinn and Chengdu there a visible few signs of fare abolition. *Source:* author.

FFPT exists in nearly 100 localities, this policy is highly controversial. For the majority of transport engineers, economists and practitioners (Cordier, 2007; Perone, 2002; Storchmann, 2003; Studenmund & Connor, 1982), FFPT is a policy that “does not make any sense” (CERTU, 2010). It supposedly poses the threat of financially destabilising PT networks, instigating “irrational” travel behaviour, generating “useless mobility” (Duhamel, 2004), and contradicting the essentially liberal perspective according to which PT is as a commodity that must always come at a price (CERTU, 2010). For scholars perceiving transport as contributor to “sustainable mobility” FFPT is not sufficiently effective in terms of generating a modal shift from private vehicles to PT (Cats, Reimal, & Susilo, 2014; Cats, Susilo, & Reimal, 2017; Cervero, 1990; Fearnley, 2013). However, variety of urban activists, journalists and public officials, who often speak from cities where FFPT has been put to a test (Giovanangelli & Sagot-Duvaurox, 2012), not only present strong empirical evidence of operational and economic savings related to fare abolition, but also discuss FFPT as an “alternative” choice that has an explicitly political, social and urban dimension, and has the capacity to confront transport “rationality” that berates fare abolition as a nonsensical instrument. Despite this controversy, very few studies have attempted to provide a coherent perspective on FFPT, and have usually done so by focusing on specific cases (Briche & Huré, 2017; Cats, Susilo & Reimal, 2017; Cordier, 2007; Volinski, 2012).

To respond to this gap, this dissertation brings together empirical material from a global geographical analysis of FFPT, and from particular FFPT programmes in Tallinn (Estonia), Aubagne (France) and Chengdu (China). This material will be analysed using questions developed in the analytical framework. However, they will not be asked in the same way or to the same extent about each of these cases of FFPT. Neither is the framework to be read as a rigid checklist against which each case of FFPT discussed in the thesis will be assessed. Instead, the framework consists of analytical questions that will be asked across the empirical material (presented in Chapters 4, 5, 6 and 7), highlighting its most relevant elements and insights. While the framework helps to obtain empirical material from the case, it is simultaneously induced and tested by the FFPT reality that it helps to analyse.

Asking these questions (see *Table 1* below) involves unravelling power relations and contradictions behind seemingly uniform practices of fare abo-

**PARTICIPATION:  
enabling appropriation and production of urban space**

<b>Inclusive?</b>	<ul style="list-style-type: none"> <li>• How and by whom is the idea of fare-free public transport (FFPT) conceived, decided about and implemented?</li> <li>• Whose support, involvement/exclusion is crucial to abolish fares?</li> <li>• What problems is FFPT supposed to address? How and by whom are they defined?</li> </ul>
<b>Deliberative?</b>	<ul style="list-style-type: none"> <li>• What kind of tensions and conflicts accompany fare abolition? Who do they involve and what is their outcome?</li> <li>• Who is against FFPT?</li> </ul>
<b>Reconciling the top-down and bottom-up?</b>	<ul style="list-style-type: none"> <li>• What kind of bottom-up groups are involved in or excluded from FFPT alongside top-down institutional actors, and in what capacity?</li> </ul>
<b>Interactive?</b>	<ul style="list-style-type: none"> <li>• If there is a participative process accompanying FFPT: when does it take place, how is it structured, and what is its role?</li> <li>• How are public transport (PT) workers and passengers involved in FFPT?</li> </ul>

**POWER:  
revealing and challenging its existing configurations**

<b>Political?</b>	<ul style="list-style-type: none"> <li>• What issues are addressed in the debate about fare abolition?</li> <li>• How political is FFPT? To what extent does it articulate the political position of actors it involves?</li> </ul>
<b>Redistributive?</b>	<ul style="list-style-type: none"> <li>• Does FFPT alter the power relations underpinning transport? Does it change local urban regimes?</li> <li>• Does FFPT empower PT workers and passengers? Is it created with, and not only for its workers and users?</li> <li>• Have labour conditions of PT workers changed under FFPT?</li> </ul>

**BEYOND transforming MOBILITY patterns:  
concerning all aspects of the urban environment**

<b>Multi-scalar and holistic?</b>	<ul style="list-style-type: none"> <li>• What is the cost of FFPT and how is it financed?</li> <li>• How does FFPT affect mobility patterns? Does it affect the number of passengers? Does it facilitate a modal shift to public transport, and from modes of transport?</li> <li>• What is the social impact of FFPT? Does it address specific social groups?</li> <li>• What are the spatial/scalar dynamics and impact of FFPT? Does it have the ambition to embrace to whole urban society and territory?</li> </ul>
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**A UTOPIA on the HORIZON:  
reaching beyond existing socio-spatial configurations**

<b>Effective and transformative</b>	<ul style="list-style-type: none"> <li>• Is FFPT closer to a singular project or a broad strategy?</li> <li>• To what extent does it involve a continuous change and reflection that reaches beyond existing institutional frameworks?</li> <li>• How does FFPT relate to other aspects of urban development?</li> </ul>
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*Table 1.* A RTTC-inspired framework for critical analysis of transport policies and practices.

lition. For on the surface (see *Figure 1* above), fare-free networks in Tallinn, Aubagne, and Chengdu bear many similarities, and do not appear to be very unique. Therefore, it is the aim of the thesis to study their economic, political and spatial underpinnings—their relation with the city—to bring to light their distinct motivations, qualities and effects. In this sense, the critical, RTTC-inspired perspective on transport is expected to produce new knowledge about the policy of fare abolition and its particular programmes. At the same time, studying FFPT is likely to contribute to a better understanding of socio-political landscapes of cities that abolished fares.

#### **4.2. Selecting the case study: fare-free public transport**

This doctoral dissertation focuses on a specific policy case of FFPT that will be analysed in a variety of localities. This strategy is informed by the methodological literature on “small-*n*” research. It demonstrates how scientific investigation centre upon a single case can form a basis for generalisation, albeit this case has to be strategically selected (Flyvbjerg, 2006).

Gerring (2007) discusses various strategies that can guide the selection process, depending on whether one searches for a case that is “typical” (embodying typical traits of the researched phenomenon), “extreme” (representing extreme or unusual characteristics), “most similar” or “most different”

from other cases analysed in the literature. Particularly relevant for this dissertation appears the tactic of identifying a “crucial case,” defined as a case that “must closely fit a theory if one is to have confidence in the theory’s validity, or conversely, must not fit equally well any rule contrary to that proposed” (Gerring, 2007, p. 115). In other words, it is a case that is “least likely” or “most likely” to follow a theoretical prognosis. A “least-likely” case is one that, on all dimensions except the dimension of theoretical interest, is predicted not to achieve a certain outcome, and yet does so” (Gerring, 2007, p. 115). A “most-likely” case is one that, on all dimensions except the dimension of theoretical interest, is predicted to achieve a certain outcome, and yet does not. In other words, it is a chosen “to achieve information that permits logical deductions of the type, ‘if this is (not) valid for this case, then it applies to all (no) cases’” (Flyvbjerg, 2006, p. 230).

Based on this approach, FFPT is selected as the “most likely” case of a transport policy the understanding of which requires embedding transport-related considerations in an urban perspective. In other words, should applying the urban lens does not prove relevant for studying FFPT, it is probably not relevant for studying any other transport policy. However, the capacity of FFPT to acquire an “alternative” character, and to “critically” de-centre local transport debates in a variety of local contexts is likely to hinge on a variety of conditions that will be analysed in the empirical part of the thesis. This is why grasping local conditions under which fare abolition programmes are implemented, and connecting to wider issues of urban space and politics, might be crucial for understanding why and how FFPT works (or does not).

The particular choice of FFPT is motivated by its apparent ability to directly address a variety of limits and ills of neoclassical and sustainable approaches to transport. Rather than focus on increasing the technical and economic efficiency of transport, and improving quality regardless of who uses it, FFPT seems to be rooted in a reflection about who uses, pays for and benefits from transport. The idea of providing unconditional access to public transport (PT) to all its existing and potential users may also seem as a practical realisation of “transport justice” (Beyazit, 2011; Gössling, 2016; K. Martens, 2017). While car drivers continue to receive numerous privileges—of which the infamous policy of the Belgian federal state concealing a tax relief as company car bonus is but one example (X. May, 2017)—it could be argued that PT passengers in fact pay twice for the service they use: first by

paying their taxes, and then by purchasing a ticket. FFPT potentially questions this paradox, recognising PT as an inherently public service and element of urban welfare that cannot be subsumed to the pay-per-use logic. Fare abolition thus appears to be at odds with the entrepreneurial definition of transport as a commodity and asset, which it instead supposedly conceptualises as a common good. A more detailed discussion of different views on fare abolition—voiced both within and outside academia—will be provided in Chapter 4.

Last but not least, providing a detailed analysis of FFPT is relevant in terms of informing and changing the transport situation in the Brussels-Capital Region (BCR), by whose authorities this doctoral project is funded and where it is situated. The BCR is the core of the wider Brussels metropolitan area, where transport-related issues have been the subject of heated public debates ever since the BCR was created in 1989, when it was separated from the Walloon and Flemish regions of Belgium. However, these discussions have rarely referred to the question of abolishing fares in regional or national PT networks. Among the BCR authorities responsible for transport planning and operation—respectively Bruxelles Mobilité and the Brussels Intercommunal Transport Company (STIB/MIVB)—FFPT not considered as a relevant and feasible policy. For Bruxelles Mobilité, reducing the income from tickets to zero seems to contradict their efforts towards raising funds for continued investment in construction and maintenance of car infrastructure, and the costly extension of Brussels' metro system. For STIB/MIVB, FFPT further stands in the way of improving the quality of PT services, the increase of which is necessary for PT to compete for passengers against other modes of transport. Their focus is therefore on increasing the speed, frequency and capacity of PT, which is assessed to be best achieved by developing the underground infrastructure that bypasses car traffic.

However, as demonstrated by local transport scholars, this focus may be too narrow as it pays insufficient attention to socio-economic and spatial inequalities that are inherent in BCR's transport system. As a large part of Brussels population depends on PT—in 2010, as many as 35,2% of households in the BCR did not own a car, and 60,1% did not own a bicycle, and only 4,9% had a motorbike—the geography of PT accessibility remains socio-spatially uneven (Lebrun, Hubert, Huynen, De Witte, & Macharis, 2013). In other words, a significant part of PT passengers do not have choice to use another

er mode of transport (Hubert, Lebrun, Huynen, & Dobruszkes, 2013). Meanwhile, as the prices of PT fares in the BCR go up faster than the inflation rate, the relative contribution of passengers to STIB/MIVB's finances is increasing, although in 2016 only 33,18% of the company's operational budget was covered by the sales of tickets (down from 36,53% in 2015 and 35,88% in 2014) (Société des Transports Intercommunaux de Bruxelles, 2015, 2016, 2017), which is well below the European average of 48% farebox revenue (Flausch, 2017). While for some officials this means—in somewhat exaggerated terms—that passengers are a “cash machine [that] we undoubtedly have to milk more [...] to move to a situation where public transport is paid at its actual price.” (knack.be, 2014), several citizen groups and urban social movements (e.g. Inter-Environnement Bruxelles) along with the anti-capitalist party (PTB-PVDA) have argued that reducing passengers' contribution to PT budget by its fares is a policy that is not only feasible but also desirable given the inequality of Brussels' transport landscape.

### **4.3. Selecting specific instances and localities of FFPT programmes**

The policy of FFPT having been chosen as the case study for the research, particular instance of FFPT programmes implemented in different urban contexts have to be selected. At this stage, I employ the strategy of “following the policy” of fare abolition. This notion originates in the interest among political scientist in how policy ideas “circulate” and get “transferred” among institutions (Cook, 2008; Dolowitz & Marsh, 1996; Evans & Davies, 1999; Marsh & Evans, 2012) engaged in what has been conceptualised as policy-related “lesson-drawing” (P. J. May, 1992; Rose, 1991, 1993; D. Stone, 1999). A more geographical perspective on this process has been provided by the literature that conceptualises it not as linear transfer, but more a multi-directional “mobility” of policies (Jones, Pykett, & Whitehead, 2014; McCann, 2004, 2011; McCann & Ward, 2011; Peck, 2011; Ward, 2006).

Notably, these approaches have been applied to study how policy models in the particular field of transport are transferred (Bray, Taylor, & Scrafton, 2011; Button, 1998; Jong & Geerlings, 2005; Lodge, 2003; Marsden & Stead, 2011; Wang, 2010) and mobilized (Wood, 2014a, 2014c, 2015). Examples of thus analysed “travelling” policies include sustainable transport

measures (Macário & Marques, 2008), congestion charging (Attard & Enoch, 2011), urban freight measures (Timms, 2014), rail restructuring instruments (Lodge, 2003), or bus rapid transit (Wood, 2014c).

FFPT is visibly acquiring a “mobile” character, as the knowledge about it increasingly “travels” across different localities, where it engages a variety of actors engaged or at least interested in implementing and promoting FFPT. This means that a network around the policy of fare abolition is beginning to take shape. I argue that identifying key nodes in this network—“following” the policy (Peck & Theodore, 2012) “in ways that others follow ‘things’ or commodities” (McCann & Ward, 2012, p. 42) (McCann & Ward, 2012, p. 42) and actors that mobilise it (Wood, 2014b)—is a valid strategy for selecting key examples of FFPT programmes. However, this dissertation does not inquire into how the policy of FFPT “mutates” as it “moves” between cities. Rather, the policy mobility approach is used here as an inspiration for the selection of specific sites of FFPT, as listed below:

- Tallinn (Estonia). Having abolished fares in January 2013, Tallinn proclaimed itself as the “Capital of Free Public Transport,” (Savisaar, 2013). Indeed, Tallinn is the main node in the growing international FFPT network, and one of the key international actors promoting fare abolition. It does so by hosting regular thematic events, and sending its representatives and municipally-owned media to other localities experimenting with FFPT, including Aubagne and Chengdu (see below). The centrality of Tallinn in the FFPT network led to its recognition in the early states of this research, and Tallinn became an obvious starting point for investigating fare abolition. Currently, Tallinn is also the largest city in which fares have been fully abolished<sup>7</sup> (443,623 inhabitants in 2017). However, free rides are available only for official city residents, and visitors and commuters to the city continue to pay. The case of Tallinn will be analysed in Chapters 5, 6 and 7.
- Aubagne (France). Located in the suburbs of Marseille, Aubagne is the centre of Communauté d'agglomération du pays d'Aubagne et de l'Étoile (Agglomeration community of

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<sup>7</sup> See Chapter 5 for a definition of full and partial FFPT.

Pays d'Aubagne et de l'Etoile, CAPAE), with the population of 104,018, on whose the territory fares were abolished in May 2009 for all users. The case of Aubagne has been selected as it is frequently mentioned in the domestic debate about FFPT in Tallinn: images and narratives from Aubagne were captured by Tallinn officials and media to support the case for fare abolition back home. Having itself “learned” about FFPT from the town of Châteauroux (France), Aubagne until recently has functioned as the centre of the French FFPT network, which currently consists of 20 towns with FFPT. Therefore, Aubagne was selected due to its involvement in a policy-related exchange with Tallinn, and its centrality in the French landscape of fare abolition. The case of Aubagne will be analysed in detail in Chapters 5 and 6.

- Chengdu (China, Sichuan). A booming metropolis (over 10,000,000 inhabitants in the urban core, and additional 4,5 million population living in the outer agglomeration) and a key centre of urban development in inland China, Chengdu is the largest city to have ever experimented with fare abolition, and a slightly odd element in the global FFPT landscape. It has been engaged in a FFPT-related exchange with Tallinn and Žory, having sent its officials to FFPT events in both cities. Chengdu's FFPT is partial: the ticket-free regime embraces only part of the bus network (so-called “community bus” routes, of which at least 116 currently exist across the city, each being between 1 and 3 km long), while its remaining part is ticket-free only before 7am every day. Meanwhile, the metro system does not form part of FFPT. Empirical material from Chengdu will be used in Chapter 5.

The empirical material from the three FFPT programmes will not be used evenly, and will be referred to illustrate specific points raised by the theoretical framework. One consequence of this approach is the material from Tallinn and Aubagne is analysed in much more detail than that from Chengdu, which in the course of research has become a secondary case study.

Utilising the policy mobility tactics of “following” to selecting its programmes that will be analysed in the empirical part of the dissertation means that these programmes are not chosen due to any apparent or potential similarities between the cities in which they have been implemented. Contrarily, these urban contexts appear to be extremely different from one another, and one could in fact argue that fare abolition is one of the few features that they have in common. Also, the choice of these localities is in no way motivated by the search for cases that would be similar and hence comparable to Brussels. Instead, the relevance of this research to various BCR stakeholders lies in providing a contextualised knowledge about FFPT as a specific transport policy, and not in comparing various contexts in which this policy has been implemented elsewhere to that of Brussels.

The selection of FFPT programmes having been inspired by the “policy mobility” literature, the way in which they will be compared in the remainder of this dissertation is inspired by the perspective of “comparative urbanism” (Robinson, 2011, 2015). Its ambition is therefore, on the one hand, to compare a specific policy model across different urban contexts (rather than to compare different cities). While building on what policy mobility scholars recognise as the relational aspect of urban policy-making—its embeddedness in trans-spatial network, “travelling” and “mobilised” ideas and actors—this thesis is more focused on the local, territorial and spatial context from which the policy of FFPT originates, and in which it is embedded and implemented.

#### **4.4. Methods**

The analysis of FFPT in each city is based on qualitative and mixed methods. Approximately 80 semi-structured interviews have been conducted altogether in three FFPT sites. I spoke with local stakeholders including relevant officials on the municipal, regional and national level, representatives of boards of public transport operators and their staff (e.g. drivers, ticket controllers), local transport experts and academics, representatives of civic society and citizen groups. In Aubagne, I additionally interviewed participants of workshops and debates organised around fare abolition.<sup>8</sup> Next, to detect official records of FFPT implementation, I analysed the minutes of

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<sup>8</sup> An anonymised list of all interviewees can be found in the Appendix.

meetings of political bodies that discussed fare abolition: the municipal councils in Aubagne and Tallinn, and the council of former Communauté d'agglomération du pays d'Aubagne et de l'Étoile (Agglomeration community of Pays d'Aubagne et de l'Étoile, CAPAE), in which Aubagne is located. I also studied existing and forthcoming mobility-related and budgetary plans and reports, and academic literature, which existed only for the case of Tallinn. Finally, in Aubagne, Chengdu and Tallinn (in the latter two cases using on-line translation software), I examined local media outlets to obtain additional information about the process in which FFPT was developed.

The empirical data was gathered both in desktop research and during fieldwork in Aubagne (February-March 2016), Tallinn (May 2016 and December 2016-January 2017) and Chengdu (August-November 2016). The last of the fieldwork stays was undoubtedly the most challenging one, due to many barriers related to language and institutional conventions, which meant that reaching key actors and documents was particularly difficult.

However, prior to conducting research on FFPT, extensive empirical material was also collected in Brussels with the aim of addressing a number of theoretical hypotheses and questions. Notably, I wanted to detect existing approaches to urban transport in the academic literature and analyse how they are reflected by transport agendas in Brussels (in Chapter 2). Furthermore, I intended to develop and test the RTTC-inspired analytical framework using the extension of the pedestrian zone in Brussels' historic core as an empirical vignette (in Chapter 3). To that end, I conducted an extensive literature review of wide literature on urban transport and planning from the past 50 years, identifying approximately 800 most cited articles searching for keywords such as “urban transport,” “urban mobility,” “transport policy,” and “transport planning” but also—to explicitly detect critical perspectives—“equity,” “equality,” “justice,” “commons,” “right,” “critical,” and “alternative”. Out of this group, based on citation results, 175 articles were selected for an in-depth review.

To analyse how this literature reverberates in the transport debate in Brussels, and thus test the emerging hypothesis of the dominance of neoclassical and sustainable perspectives vis-à-vis fragile “critical” approaches to transport, I analysed how local academics, institutions, and citizens' groups make sense of transport and mobility issues in Brussels by detecting what

key problems are defined, what broad visions behind transport are outlined, and what specific solutions are proposed. This led me to conduct 19 semi-structured interviews with high-rank officials representing and actively defining key stakes and strategies within the policy field. The interviewees included mobility authorities at the municipal, regional, and federal level, public transport (PT) operators, members of the civil society, and local academics. Furthermore, I reviewed academic and grey literature produced by the interviewees' institutions.

## 5. Structure of the thesis

The thesis is composed of two parts. The first part (Chapters 2 and 3) focuses on a theoretical exploration of the academic literature on urban transport, and the development of analytical RTTC-inspired framework for critical analysis of urban transport. The second part of the thesis applies the conceptualised framework to analyse the policy of fare-free public transport (FFPT), first from a global perspective (in Chapter 4), and then looking at specific cases of FFPT in Tallinn, Aubagne and Chengdu (in Chapters 5, 6 and 7). Chapter 8 provides a conclusion to both parts of the thesis.

The first part of the dissertation opens with Chapter 2 (a paper published in *Urban Geography*; Kębłowski & Bassens, 2017) that inquires into the capacity of contemporary transport and mobility studies to critically engage with the social realities of transport policy and practice. Based on the conceptualisation of “circuits of knowledge” (Featherstone & Venn, 2006; Healey, 2013; McCann, 2008), and the “frame resonance” (Snow, Rochford, Worden, & Benford, 1986) to scrutinise the extent to which transport and mobility agendas are framed around various approaches within academia. The setting of this inquiry into systematic relationship between academic knowledge and place-based policy agendas is Brussels—a city known for its long-standing tradition of functionalist and car-oriented planning, where at first sight technical framings of local mobility problems are dominant, suggesting that local transport stakeholders may be disconnected from agendas embedding transport and mobility in wider political and economic debates. This analysis

reveals a hegemonic discourse centred around a paradox between a growth-oriented neoclassical “orthodoxy” and a largely de-politicised perspective on transport as contributor to “sustainable” development. By contrast, academic voices that stress structural inequalities underpinning transport and mobility issues are rarely picked up in the official political agenda, making the role of “critical” political-economic academic knowledge in Brussels marginal.

Chapter 3 (a paper submitted to *Transport Policy*) builds on this recognition to further explore how the “sustainable” perspective on urban transport—despite its attempt to place a number of social and environmental issues on the agenda—seldom engages with the fundamentally political question of who ultimately participates in the making of those sustainable urban futures, and who ultimately benefits from them. Leaving these questions undebated, this chapter argues, adds to wider trends of de-politicisation in the field of urban transport, and to a substantial extent veils fundamental political-economic choices embedded in transport planning and practice. Consequently, the chapter inquires into possible ways of re-connecting these questions with explicit political-economic considerations deriving from critical urban theory. It therefore attempts to delineate a strategy for mobilising and strengthening “critical” perspectives on urban transport. To do so, it explores the possibility for developing a framework for a critical analysis of transport practices and policies, building on Henri Lefebvre’s conceptualisation of “the right to the city.” Throughout the chapter, this theoretical framework is illustrated by the empirical example of the project of extending the pedestrian zones in Brussels’ historic core. “Pedestrianisation” is referred to here as a salient example of a “sustainable” transport policy that has gained popularity across a variety of urban contexts, and a project that accurately illustrates a number of key political economic dimensions that undergird contemporary transport policy and practice.

The typology of neoclassical, sustainable and critical approaches to transport underpins Chapter 4 (a paper submitted to *Transportation*), which opens the empirical part of the dissertation. Its objective is to provide a comprehensive introduction of the policy of fare-free public transport (FFPT). The chapter uses a variety of sources to identify all existing cases of FFPT, and attempts to chart their geography of FFPT. This mapping exercise is placed against the background of the debate about the viability and desirability of fare abolition. The chapter also aims at enhance conceptual clarity

about FFPT by identifying and defining different forms of fare abolition. This chapter prepares the ground for further three chapters that focus on specific cases of FFPT.

Chapter 5 (an extended version of a paper submitted to *Transportation Research Part A*) begins this in-depth exploration by bring empirical material from FFPT programmes in Aubagne, Tallinn and Chengdu. Its aim is to verify a series of accusations coming from the “sustainable” paradigm against the idea of fare abolition. Notably, “sustainable” transport scholars criticise FFPT as it (1) allegedly reduces income from tickets thus constituting a financial harm to transport operators, and further (2) acts to the detriment of sustainable mobility by supposedly failing to attract car drivers to collective transport. The chapter addresses this criticism by inquiring into financial as well as mobility-related effects of FFPT, including its impact on passenger volumes and modal share. It further opens the perspective on FFPT that reached *beyond mobility*-related considerations, and briefly analysing its capacity to as a harbinger of urban *utopia*. The chapter thus explores the last two elements of the RTTC-inspired framework, while the other two elements inspire the investigation into FFPT in Chapters 6 and 7.

Chapter 6 (a paper in preparation for submission to *Environment and Planning A: Economy and Space*) thus focuses on the questions of *participation* and *power* in FFPT by looking into the process of conceiving, developing and implementing the policy of fare abolition. It applies to the urban regime concept as a useful proxy for understanding the politics of FFPT, analysing how fare abolition may enter and alter local power relations. The empirical analysis focuses on FFPT cases in Aubagne and Tallinn, which albeit separated by important contextual differences are seemingly united by their alleged attempt to provide unconditional “mobility to all,” and to challenge existing transport strategies. Yet, in both cities important questions remain concerning the alignment of interests that initiated and undergirded the process of conceiving FFPT, whether and how this process effectively challenged the predominantly top-down ways of local policy-making, and in turn how fare abolition affected power relations shaping local transport agendas.

Chapter 7 (a paper currently being revised for publication in *Environment and Planning C: Politics and Space*) continues the analysis of participation- and power-related questions in FFPT, by providing a detailed analysis

of the process that led to the implementation and development of FFPT in Tallinn, the largest programmes of such kind to date. The focus of the chapter is on the political and spatial dynamics of Tallinn's FFPT, analysed through the perspective of transport justice. The chapter inquires into *how* Tallinn's FFPT was developed, *who* has access to free travel, and *where* its key impact can be identified.

Chapter 8 concludes the dissertation, summarising both its theoretical and empirical findings, reflecting on the RTTC-inspired framework, and delineating pathways for future research.

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## CHAPTER 1: INTRODUCTION

Zitouni, B., & Tellier, C. (2013). How the technical bodies build the city. *Brussels Studies*, (64), 1-18.

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# Part One

## Chapter 2

**“All transport problems are essentially mathematical”:  
The uneven resonance  
of academic transport and mobility  
knowledge in Brussels**

# **“All transport problems are essentially mathematical”: The uneven resonance of academic transport and mobility knowledge in Brussels**

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This chapter has been published in *Urban Geography* and is currently in press.

## **Abstract**

This paper presents an inquiry into the capacity of transport and mobility studies to critically engage with contemporary policies. Drawing on the conceptualisation of circuits of knowledge, the paper scrutinises the extent to which transport policy agendas are framed around various approaches within academia. An extensive literature review reveals that the academic field of transport and mobility is organised around a hegemonic core of “neoclassical” and “sustainable” approaches. Meanwhile, a critique of these dominant approaches is emerging in an attempt to (re)embed mobility issues in urban political economy. This threefold knowledge typology visibly resonates within transport policy agendas in Brussels, where we detect a growth-oriented and largely depoliticised dual hegemony of neoclassical and sustainable narratives, with critical academic voices rarely entering official agendas. The paper concludes with a reflection on the difficulties, yet also the need to mobilise critical academic knowledge in the field of transport and mobility.

## **Keywords**

Transport policy, sustainable transport, urban political economy, critical urban theory, sociology of knowledge, circuits of knowledge

## 1. Introduction

"All transport problems are essentially mathematical problems."<sup>1</sup>

Across the globe, transport has assumed a crucial role in metropolitan governance. Several key notions in contemporary urban policy and planning that imagine cities as "smart," "compact," or "resilient" hinge on mobility "solutions" to metropolitan problems (Debnath, Chin, Haque, & Yuen, 2014; Eichhorst, Bongardt, & Miramontes, 2011; Holden & Norland, 2005). Yet, despite its increasing centrality, transport is rarely scrutinized in terms of its contribution to the uneven socio-spatial development of urban areas, for instance through the reproduction of class, gender, and ethnic divides (Lucas, Van Wee, & Maat, 2016; Reigner, Brenac, & Hernandez, 2013). While a critical approach to transport could seek to unveil how socio-spatial inequalities are related to political, and therefore essentially conflictual choices over distribution of scarce funds, practitioners and policy makers appear to frame mobility issues in different terms altogether. As demonstrated above in a somewhat extreme statement from a high-ranked representative of Bruxelles Mobilité, the process of developing transport policy involves a language imbued by mathematical models and technical knowledge. In this paper, we argue that the reproduction of such policy frames builds on clear resonances with specific types of academic knowledge. As we demonstrate below, many academic contributions in the field of transport and mobility do not focus on the question of uneven socio-spatial development—instead, they center upon on issues of utility, efficiency, and economic growth achieved through "rational" planning and decision-making. Transport is thus approached in a manner that can be understood as "neoclassical" (Girnau & Blennemann, 1989; Grant-Muller, Mackie, Nell-thorp, & Pearman, 2001). Or, since a few decades, by introducing a number of environmental and social issues to the debate and therefore positioning itself as a critique of the neoclassical approach, a growing body of literature has framed the discussion about mobility as a matter of sustainable development (Banister, 2008; Hickman, Hall, & Banister, 2013; May, 2013). However, this literature has seldom posed the fundamental question of what it is that "we" want to sustain in the first place, limiting its capacity to form a critical counterpoint to the neoclassical perspective.

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<sup>1</sup> Interview with a member of the board of directors of Bruxelles Mobilité, the administration of the Brussels-Capital Region responsible for transport and mobility.

The existence of these multiple approaches raises the key issue of how academic knowledge about transport and mobility helps to legitimize and reinforce policy discourse and action. There exists strong evidence that knowledge developed in the academia has tangible effects on policy (Healey, 2008, 2013). It can be safely assumed that the field of transport and mobility is no exception to this rule, as it often assumes an "applied" character and becomes appropriated as a framing resource by practitioners, planners, and policy makers. The aim of this paper is therefore to identify the varying degree to which different types of knowledge emerging from the academic field of transport and mobility resonate with contemporary policy. Furthermore, we are interested in the capacity of transport and mobility studies to assume a "critical" character by highlighting their political and economic underpinnings and engaging with social realities (Davidson & Iveson, 2015; Legacy, 2015). Our approach relies on a reconstruction of different "circuits of knowledge" (Featherstone & Venn, 2006; Healey, 2013; McCann, 2008) in the field of urban transport and mobility, in which we observe potential processes of "frame resonance" (Snow, Rochford, Worden, & Benford, 1986). We apply this type of conceptualization to stress that academics and practitioners alike are inserted in social networks that grant them access to intellectual resources – i.e. "knowledge" or "expertise" – as well as the authority and choice to take political action.

The setting of our inquiry is Brussels, a city that constitutes a salient case for at least two reasons. First, as it hosts various European Union institutions, we can hypothesize that its metropolitan actors lie within physical and networked proximity to transnational knowledge and policy circles. Second, turning to the different types of transport-related knowledge that is circulating, from the onset we should note a long-standing tradition of functionalist and car-oriented planning in Brussels. As it continues to generate primarily technical conceptualizations of local mobility problems, it may prevent practitioners and policy makers from connecting with alternative agendas that embed urban transport and mobility in wider political and economic debates. Earlier research has indeed demonstrated the long-lasting relationship between technical knowledge, political consensus, and infrastructural development in Brussels, not in the least exemplified by the debate about a metropolitan-wide metro-and-rail network (Damay, 2014; Zitouni & Tellier, 2013). In this contribution, we wish to elaborate on the more systematic relationship between academic knowledge and place-based policy agendas.

The paper is structured as follows. Sections 2 and 3 detail theoretical and methodological considerations regarding the analysis of frame resonance between academic ideas and transport and mobility policy agendas. Section 4 corroborates the hypothesis about three distinct approaches in the extant literature on urban transport and mobility, respectively, demonstrating what we identify as "neoclassical," "sustainable," and "political economic" undercurrents. Sections 5 and 6 trace the extent to which these approaches coincide with how transport and mobility issues are framed by practitioners and policy makers in Brussels and give rise to particular policy agendas. The analysis of these agendas reveals that the degree to which various scholarly approaches resonate with the policy field is very uneven, as critical transport ideas focusing to a much greater extent on political economic undercurrents have not engendered a coherent agenda. This leads us, in Section 7, to reflect on the inevitable "situatedness" of any critique and its resultant "immobility." We conclude the article with a discussion on pathways for future research, in particular demonstrating the need to the paper ends with a plea to develop a framework to scrutinize how potentially "critical" policies travel.

## **2. Conceptualizing the knowledge relation between academic and policy fields**

Central to building a critical urban transport theory and praxis is the need for reflexivity about the role that academic knowledge may play in shaping urban realities. Of course, this process does not entail that academic ideas simply materialize in an urban setting. Rather, it has been theorized that academic knowledge can serve as an "intellectual fix" that may gradually help to secure a political consensus ("political fix") and to generate particular infrastructural and spatial typologies ("infrastructural fix" [Healey, 2008] and "spatial fix" [Harvey, 2001]). Importantly, producing academic knowledge in applied fields such as transport and mobility often hinges on bilateral exchanges with nonacademic actors. This relation has been fruitfully conceptualized and analyzed through the notion of "circuits of knowledge" (Featherstone & Venn, 2006; Healey, 2013; McCann, 2008), which

embrace a wide range of nonacademic actors including (but not limited to) politicians, technocrats, civil servants, consultants and urban planning "gurus," civil society groups, and private companies. Inherent in the notion of circuits of knowledge is the acknowledgment of the power of academics in influencing how policy agendas are set by practitioners and policy makers, including how problems are defined (or not), visions are designed (or not), and solutions are fabricated (or not). Potentially, academic knowledge may help dominant actors to work towards stabilizing and reproducing their position by setting research and policy agendas along existing problem definitions. Thus forged knowledge hegemonies or "intellectual fixes" often exclude "alternative" visions and solutions from a purposely narrowed-down debate. This allows to sustain the (post-)political order (Mouffe, 2005) that obfuscated the essentially conflictual nature of social challenges, as the usual vector of "evidence-based" decision-making is dominated by the opposing one of "decision-based evidence-making" (Slater, 2008, p. 219).

Yet, not all kinds of academic knowledge are likely to be equally influential in policy circles. In a plural field such as transport and mobility, where various approaches are vested in diverging ontological, methodological, and epistemological positions, it can be hypothesized that different types of academic knowledge will have diverse capacities in terms of entering the social realities of policy making. While subject to both internal and external tensions, different circuits ultimately reflect a community of academics and nonacademics, who share a common way of "framing" reality. Following Goffmann (1974, p. 21), the concept of a "frame" or "framework" captures processes by which people try to make sense of their environment through "schemata of interpretation." These "schemata" enable one to locate, perceive, identify, and label occurrences within their life space and world at large. Framing these occurrences imbues them with a collective meaning that influences subsequent collective action (Snow *et al.*, 1986, p. 464). In our case, we are interested to what extent policy makers and practitioners draw on academic frames when making sense of the transport reality. This academic potential, we argue, to a significant degree depends on the amount of "resonance" between scholarly work and the worldviews of policy makers and practitioners (Benford & Snow, 2000; Scheufele, 2000; Snow *et al.*, 1986). By utilizing the concept of "frame resonance," we highlight the need for transport and mobility scholars to be more sensitive to why certain frames emerging from academia are effective in guiding action, and how this effec-

tiveness depends on what Benford and Snow identify as frame consistency, empirical credibility, and the credibility of the claims makers (p. 620–621). It is through the processes of frame resonance that academic knowledge plays a key role in terms of stabilizing a circuit of knowledge and providing an intellectual fix to legitimize policy action.

This role can be exemplified by the case of metropolitan-wide metro-and-rail network in Brussels, which has been on the local agenda since a few decades. First, frame consistency is noticeable here in the congruency between beliefs, claims, and actions of policy makers embracing a dominant frame that advocates developing an “efficient” and “sustainable” transport system in a metropolitan area. Academic knowledge has helped to establish the internal consistency of the frame, for instance, by offering mathematical models allowing to translate the complexity of the world into projective technical models used to adjust rail and metro capacities and frequencies (Damay, 2014). Second, empirical credibility, which depends on the degree to which a given frame is consistent with effects in the world, has been built by continuous academic claims that positive externalities can be generated by organizing urban development around metro-and-rail nodes (Frenay, 2009). At the same time, these assertions have been contradicted by academics highlighting the socio-spatial unevenness of transport infrastructure (Lebrun & Dobruszkes, 2012). Finally, the role of credibility and persuasiveness of claims makers articulating the policy frame can be observed in the recent case of modal split projections used to make or break an urban development plan in a potentially high-value location (Boussauw & Lauwers, 2015).

### **3. Methodology**

Following the hypothesis about differential resonance of academic knowledge in policy-making circuits, our analysis of mobility policy in Brussels required detecting existing approaches to urban transport in the academic literature. Its initial screening suggested that bifurcations were in place, as certain strands of the literature have chosen the label of “paradigm” as a rallying signifier (Banister, 2008) and a way to separate themselves from other approaches. While the notion of paradigm may be a too strong term, the ob-

servation of these bifurcations in the initial screening allowed us to hypothesize that the literature was organized around different dynamic cores, which we labeled as “neoclassical,” “sustainable,” and “political economic” approaches and sought to further qualify and nuance. Observing the silence on socio-spatially inequalities resulting from – or not being addressed by – policies developed in Brussels, a next step consisted of a second, more thorough screening of scholarly publications as to whether resonances with the academic debate on these issues could be found. Therefore, the queries we ran applied not only keywords such as “urban transport,” “urban mobility,” “transport policy,” and “transport planning” but also – to explicitly detect critical perspectives – “equity,” “equality,” “justice,” “commons,” “right,” “critical,” and “alternative.” To provide a better link between this review and the debate in Brussels, we focused on primarily European, both English- and French-speaking literature, and performed the queries in *cairn.info*, Google Scholar, ScienceDirect, Web of Science, as well as libraries of Université Libre de Bruxelles and Vrije Universiteit Brussel. Out of the results obtained, we have identified 800 most cited articles as the wide literature on urban transport and planning from the past 50 years. Out of this group, based on citation results, we further selected 175 articles for further in-depth review.

The second methodological step consisted of an in-depth analysis of how transport policy in Brussels is organized around particular frames and agendas. To this end, we studied policy framing by practitioners in the policy context of the Brussels-Capital Region (BCR).<sup>2</sup> Composed of 19 municipalities, the BCR comprises the core of the wider Brussels metropolitan area. While having no authority over its Flemish or Walloon fringe, the BCR officially develops a metropolitan vision on transport and mobility issues that effectively supersede the municipal scale. We began by analyzing how local academics, institutions, and citizens’ groups make sense of transport and mobility issues in Brussels by detecting what key problems are defined, what broad visions behind transport are outlined, and what specific solutions are proposed. To capture different discourses on transport and mobility present in Brussels, 19 semi-structured interviews were conducted with high-rank officials representing and – due to their strategic position – actively defining key stakes and strategies within the policy field. The interviewees included mobility authorities at the municipal, regional, and federal level, public

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<sup>2</sup> Unless stated otherwise, throughout the text, we use the term “Brussels” to refer to the Brussels Capital Region.

transport (PT) operators, members of the civil society, and local academics. We asked our interlocutors about broad transport policy agendas as well as particular transport projects currently developed or discussed in Brussels. The interviews were then coded to allow for an effective narrative analysis to trace how interviewees frame and make sense of the complex Brussels transport and mobility reality. We further reviewed academic and gray literature produced by the interviewees' institutions, including the project of Regional Sustainable Development Plan (Brussels-Capital Region, 2014), the Regional Mobility Plan (Bruxelles Mobilité, 2011), policy reports, political party programs, bulletins and magazines published by citizen groups, academic articles specifically dealing with the Brussels' case, and a variety of newspaper and blog articles.

#### **4. Three scholarly approaches to urban transport and mobility**

The screening of literature on transport and mobility has led us to identify three sets of academic approaches. The subsequent in-depth analysis showed that although these approaches are structured around multiple dynamic "cores," they show commonalities, porous boundaries, and engagements across positions.

##### **4.1. Neoclassical approaches**

Our discussion on three distinct approaches in urban transport and mobility opens with the identification of what we label as "neoclassical" approaches. They combine two core perspectives that at first sight may appear quite distinct: transport engineering on the one hand and transport economics on the other. Transport engineering tends to focus on managing transport systems as a whole, based on models that predict transport demand. Transport economics, on the other hand, often conceptualizes transport policies by referring to the alleged rationality of the individual user and their drive to maximize individual utility. While there exist numerous differ-

ences between these two perspectives, there appears to be little disagreement between them. We argue that, when applied to the policy field, they effectively dovetail into a coherent and commanding neoclassical position that has been embraced and reproduced by an overwhelming number of academic articles in transport-focused journals.

The neoclassical body of work appears to build on two basic but largely unquestioned principles. First, both engineers and economists approach transport as an essentially rational discipline. On the systemic level, they build on empiricism, according to which scientific knowledge about transport is acquired primarily from empirical data, rather than from theoretical conceptualizations. This stance "is typically accompanied by the predictive approach of naïve instrumentalism, by which the validity of any model is solely determined by the numerical accuracy of its predictions [and thus] 'the theory gives rise to the model' (Bell, 1997, p. 36)" (Timms, 2008, p. 400). This perspective has been particularly characteristic of engineering studies. It gave rise to "predict-and-provide" strategies (Owens, 1995) that focus on offering a continuous response to ever-increasing transport demand. While employing mathematical models and computations, this approach also makes frequent analogies to natural laws, as in case of the "gravity model" that alludes to Newtonian physics (Erlander & Stewart, 1990). The micro-economist position, on the other hand, is somewhat less deterministic, since it recognizes both ontic and epistemic uncertainty, as for instance in random utility theory (Cascetta, 2009). Yet, transport economists do project a largely liberal perspective in which drivers and passengers are assumed to be making "pragmatic," "utility-based," "rational," and "free" choices in order to maximize their utility when opting for particular travel patterns, which may have further impact on decisions about housing or employment location (as criticized by Dobruszkes & Duquenne, 2004).

Second, both engineers and economists envision transport planning as major contributor to economic growth. Better transport infrastructure supposedly leads to reduced transaction costs, as it leads to increased overall speeds, smoother traffic flows, and consequently to decreased travel times that are monetized and deemed "unproductive" (as criticized by Jain & Lyons, 2008, p. 81). To achieve this, transport engineers have developed traffic forecasting and demand models that to a large extent follow the four-stage transport model of trip generation, distribution, mode choice, and assign-

ment (McNally, Hensher, & Button, 2007). These models have been widely applied alongside econometric analyses, computable general equilibrium models (Buckley, 1992; De Almeida, Haddad, & Hewings, 2010; Johannes., Artem., & Schürmann, 2010; Venables, 2007), and the cost-benefit analysis (CBA) (Girnau & Blennemann, 1989; Jones, Moura, & Domingos, 2014; Litman, 1997), which over years have become the most representative and particularly frequently applied instruments within the neoclassical toolbox.

As a result, neoclassical engineering and microeconomist approaches continue to be received in particularly powerful ways in policy circles. Neoclassical conceptualizations and methodologies have given transport an aura of an almost uniformly "expert"-led, highly technical, and essentially "rational" scientific discipline coded in mathematical language. These approaches also tend to imbue policy makers with a sense of agency to act on complex realities based on the models put forward by academics. The prevalence of the neoclassical thought is discernible in the persistence of close ties between transport policy making on the one hand and civic engineering and economics on the other. Despite recent critiques of neoclassical approaches, which we outline below, their continuous importance is evident. CBA remains popular among transport academics and practitioners alike (Eliasson, 2009; Rotaris, Danielis, Marcucci, & Massiani, 2010), having been widely embraced by the "intelligent" and "smart" transport systems that rely on "big data" collection and processing (Velaga, Beecroft, Nelson, Corsar, & Edwards, 2012).

## 4.2. Sustainable approaches

The neoclassical emphasis on the car as the primary transport technology, the resultant mono-functionalism and physical separation of people and traffic, and the predominantly technical, quantitative, and descriptive character of neoclassical approaches to transport have seen a challenge from a number of transport scholars over the last decades. The "sustainable mobility paradigm" (Banister, 2008, 2011a, 2011b; Banister & Hickman, 2013; Tight *et al.*, 2011) appears as the main conceptualization in this regard. This perspective vigorously supports designing large, dense ("proximity-based"), and "mixed-use" cities by establishing stronger links between land-use and transport policy and thereby helping to reduce the number, scale, and length

of journeys through limiting distances between activities and functions. This approach therefore promotes a shift from car towards "soft" transport modes and PT. It further breaks with purely economic perspectives on mobility by embracing a wider spectrum of environmental and social challenges, paying more attention to individual behaviors and lifestyles, and calling for more participative ways of generating transport policies and practices to include a wider range of urban stakeholders. "Sustainable" transport is thus envisioned as "an essential element in city viability, vibrancy, and vitality (Banister, 2011b, p. 953), that is both "attractive and affordable" (Banister, 2008, p. 75). It constitutes the key component of the "good city" (Jacobs, 2011) not only economically performing in the neoclassical terms but also socially cohesive and diverse, environmentally friendly, healthy, and participative. While these are the core aspects of the sustainable perspective to transport, it has to be noted that they have often been interpreted and appropriated at odds with Banister's (2008) original work, as demonstrated by Gössling and Cohen (2014).

Scholars emphasizing the issue of sustainability have regularly voiced their critique of CBA (Grant-Muller *et al.*, 2001; Thomopoulos, Grant-Muller, & Tight, 2009; Van Wee, 2012). However, their efforts have first and foremost focused on improving this neoclassical tool, instead of rejecting it altogether. Thus, conceived multi-criteria analysis (Tudela, Akiki, & Cisternas, 2006), social CBA (Saitua, 2007), multi-actor multi-criteria analysis (Macharis, De Witte, & Turcksin, 2010), as well as socially and environmentally oriented transport appraisals (Carse, 2011; Geurs, Boon, & Van Wee, 2009) have led public authorities to develop traffic models incorporating a variety of social and environmental factors. Equally influential in this regard have been the calls for a more profound acknowledgment of issues of accessibility, equality, social justice, social exclusion, and transport disadvantage in transport planning (Church, Frost, & Sullivan, 2000; Lucas, 2006, 2012; Lucas, Bates, Moore, & Carrasco, 2016; Van Wee & Geurs, 2011).

In defense of their respective contributions to the advancement of transport theory and methodology, scholars and practitioners representing the neoclassical and sustainable perspectives have been engaged in a vigorous debate.<sup>3</sup> Nonetheless, their discussion reveals striking overlaps, similarities, and implicit agreements. However, useful may have been the attempts

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<sup>3</sup> See Chapter 1 for a discussion of heterogeneity of "sustainable development".

to balance mathematical models and tools by embracing a variety of social and environmental aspects, the neoclassical concern with “‘law’ seeking, model building, and the articulation of ‘theory,’” which had long been identified as a significant limitation (Hurst, 1973, p. 168), seems to prevail in these efforts. Placing stronger emphasis on the issues of governance, environmental damage, and social inequality may have expanded the scope of challenges related to transport beyond those relating purely to the question of technological development. However, it has not prevented representatives of the “sustainable mobility paradigm” from joining the neoclassical vision of transport research as a politically neutral and objective activity. Consequently, “sustainable” approaches repeatedly refer to a plethora of technological innovations and fixes – e.g. electric and low emission vehicles, biofuels, shared and automated vehicles sharing, urban trams and light rail, bus rapid transit, high-speed rail, tele-work, tele-shopping – for their potential to “re-generate” urban areas (Hickman *et al.*, 2013). Permeated by technological determinism (Offner, 1993), sustainable future-thinking scenarios thus help to escape discussions on contemporary problems by setting primarily quantitative objectives that relate primarily to physical or environmental issues (e.g. CO<sub>2</sub> emissions, energy use) while paying much less attention to political or social innovations available (as criticized by Baeten, 2000; Timms, Tight, & Watling, 2014).

Both neoclassical and sustainable approaches further tend to atomize structural causes for mobility-related problems. Among the numerous studies that identify accessibility to transport networks as the key factor of social inclusion (Farrington & Farrington, 2005; 2007; Casas & Delmelle, 2014; Preston & Rajé, 2007; Kenyon, Lyons, & Rafferty, 2002; Bonsall & Kelly, 2005; Van Wee, 2016), many have equated it with extending one’s individual, “rational” choice, for instance among different housing locations, employment opportunities, and transport modes (Farrington & Farrington, 2005). This perspective introduces an essentially normative and moral geography by praising particular behaviors, lifestyles, and modes (e.g. cycling, walking) while condemning others (e.g. commuting by car, flying). “Good” citizens (e.g. PT users, car-poolers) are hence juxtaposed with “bad” ones (Green, Steinbach, & Datta, 2012) in an essentially atomistic and moralizing perspective. This further encourages a belief that the transition towards a “sustainable” society is attainable primarily via behavioral means and could embrace a socially diverse audience by uniformly embracing all social strata, from the

highly mobile urbanites to the urban precariat. The consequent reluctance to discuss potential social costs generated by this transition appears in tune with the tendency neither to “explor[e] the broader implication of a comprehensive transport policy” (Beyazit, 2011, p. 130) nor to “address issues of power or social position of individual travelers” (Levy, 2013, p. 4).

### 4.3. Political economic approaches

The depoliticized debate between neoclassical and sustainable transport approaches is not only unproductive, as it fails to point out the political and economic underpinnings of transport policy and practice, but also largely hegemonic, as it often excludes alternative standpoints. Contra this hegemony, which may be offering a significantly incomplete perspective on urban transport, has emerged a plethora of critical, political economy readings. They attempt to provide – complementary or alternative – re-politicized perspectives on urban transport. A particularly influential among them has been the proposal to recognize the “mobility turn” in social sciences (Sheller & Urry, 2006). By combining insights from social sciences, geography, cultural studies, and political studies (Cresswell, 2010; Sheller, 2014; Urry, 2000, 2007), its proponents call into question the spatially fixed and scalar perspective on mobility. However, they have repeatedly avoided engaging in profound socio-spatial analyses, let alone investigations into issues of social class.

Nonetheless, a number of political economy analyses of urban transport have explicitly referred to a wide range of socio-political issues including – but not limited to – class, gender, race, ethnicity, disability, and age (Clark & Wenfei, 2013; Golub, Marcantonio, & Sanchez, 2013; Hall, 2004; Kaplan, 1996; Law, 1999; Levy, 2013; Sanchez & Brenman, 2010; Sheller, 2014; Sultana, 2005). While the sustainable perspective rarely highlights the political causes behind socio-spatial exclusion, inequality, and poverty related to transport (Schwanen, 2016; Schwanen *et al.*, 2015), the political economic approaches share a fundamental recognition of political processes and regulatory frameworks that condition mobility (Aldred, 2012; Baeten, 2000; Dobruszkes & Marissal, 2002; Hall, 2010; Henderson, 2004; Hurst, 1973; Martens, Golub, & Robinson, 2012; Martens & Van Weelden, 2014; Røe, 2000; Schwanen, Banister, & Anable, 2011; Yago, 1983).

Whereas political economy approaches to urban transport understand power relations and norms as inherent components of mobility (Butcher, 2011; Hall, 2004; Levy, 2013; Timms *et al.*, 2014), the neoclassical and sustainable perspectives obfuscate them. The neoclassical approach explicitly relies on a "framing device of scientification" (Skillington, 1998, p. 460) that reproduces the domination of authoritative figures such as engineers, whose "expert" knowledge helps to legitimize existing power relations (Flyvbjerg, 1998). At the same, alternative perspectives are labeled as "non-expert," making them supposedly irrelevant and unwelcome. In a somewhat more conspicuous manner, the proponents of sustainable transport and "good transport planning" (Tight *et al.*, 2011, p. 1584) call for generating policies and practices in a more participative manner (Banister, 2008, 2011a; David & Hickman, 2013). This entails embracing a wider spectrum of stakeholders and has been demonstrated to provide new political opportunities for various (informal/ bottom-up) urban movements to partake in transport-related formal decision-making (Batterbury, 2003). However, participation is envisioned here as assuming a consensus-building role and building legitimacy and acceptability for the sustainable agenda (Isaksson & Richardson, 2009), rather than providing room for a genuinely political debate in which a variety of mobility scenarios may be considered. "Participatory engineering" (Kaufmann, Jemelin, Pflieger, & Pattaroni, 2008) is thereby demonstrated to accentuate the privileged position of the dominant actors (e.g. transport and planning authorities) vis-à-vis the dominated ones (e.g. trade unions, civic associations, and bottom-up movements) (Epprecht, Von Wirth, Stünzi, & Blumer, 2014). "The harmonious and conflict-avoiding vocabulary" employed by the sustainable approach "ignores and silences the deeply contested ways through which the transport system is continuously shaped and transformed and which inevitably results in a variety of winning and losing interest groups" (Baeten, 2000, pp. 70-71).

In other words, unlike the neoclassical and sustainable approaches that focus on regulating and altering individual mobility-related behaviors, the political economy approaches strive to understand and challenge the social, political, economic, and cultural structures that stand behind the "unsustainable" ways in which contemporary transport policy and practice is produced. This allows to raise the question about whose stake and interests are addressed by particular transport policies and practices. It further helps to reveal a number of "transport taboos. They include the disparity between the

highly unequal environmental contributions between highly mobile rich and less-mobile poor, the unwillingness of the highly mobile to reduce their level of mobility, and the inefficiency of market-based or technology-based solutions in terms of facilitating such a reduction. As Gössling and Cohen (2014) demonstrate, these issues rarely appear in political agendas, as addressing them “would require transcending neoliberal forms of governance to initiate fundamental sociocultural change” (p. 198).

Political economy approaches thereby demonstrate how capitalist relations underpin transport policy. Critical scholars have exposed how the deeply contradictory marriage between emission-cutting sustainable ecology and growth-based economics has put forward a combination of behavioral stimuli, technological innovations, and market-based instruments that inevitably engender a social lock-in (Gössling & Cohen, 2014). Instead of critically scrutinizing growth agendas, thereby advanced “ecological version of neo-liberalism” (Schwanen *et al.*, 2011, p. 999) justifies and mythologizes its “green-washed” permutation (Essebo & Baeten, 2012), further leading to conceptualizations of transport as a territorial asset rather than public service, and thus legitimizing socio-spatially divisive splintering (Graham & Marvin, 2001) and entrepreneurial (Harvey, 1989) practices.

## 5. Transport and mobility policy agendas in Brussels

We now turn to the particular case of Brussels to demonstrate in what way these approaches resonate with how practitioners and policy makers frame transport and mobility issues and how this leads to the production of distinct agendas that center on the identification of particular problems, visions, and solutions (see *Table 1* below).

The neoclassical approach to urban transport is clearly identifiable in a dominant recognition of traffic congestion as the fundamental mobility-related problem in Brussels, a city continuously dubbed “the European capital of traffic jams” (Pop, 2010). A sign of clear resonance of the neoclassical approach, congestion is framed as a question of poor road and parking “capacity” and system “performance.” It is therefore expected to be addressed by

Approaches to transport	Orthodox agenda		Critical
	Neoclasical	Sustainable	
<b>Problems</b>	<ul style="list-style-type: none"> <li>• “Too many traffic jams”: traffic congestion due to insufficient road and parking infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• “Too many cars”: car-based mobility leading to diminished quality of PT service and urban environment</li> </ul>	<ul style="list-style-type: none"> <li>• “Too much inequality”: car-based mobility as contributor to socio-economic and spatial inequalities as well as to continuous urban sprawl and impoverishment of the BCR</li> </ul>
<b>Visions</b>	<ul style="list-style-type: none"> <li>• Transport: a rational, expert-led discipline.</li> <li>• Transport: a motor of economic growth.</li> <li>• Transport: a place-based asset for urban attractiveness and competitiveness.</li> </ul>	<ul style="list-style-type: none"> <li>• Transport: a component of a sustainable, attractive, and liveable city.</li> </ul>	<ul style="list-style-type: none"> <li>• Transport: a common good rather than a market commodity.</li> <li>• Transport: an inherently political and conflictual issue.</li> </ul>
<b>Solutions</b>	<ul style="list-style-type: none"> <li>• Development of the underground metro as the most efficient and profitable public transport mode.</li> <li>• Development of car infrastructure.</li> <li>• Entrepreneurial financial solutions (e.g. PPPs).</li> </ul>	<ul style="list-style-type: none"> <li>• A plethora of technological and behavioural solutions: from underground metro development to “mobility coaching” and urban drones.</li> </ul>	<ul style="list-style-type: none"> <li>• Development of dense surface tram network.</li> <li>• Reflection on social and spatial impact of car infrastructure reduction.</li> <li>• Urban toll leading to reduction or abolition of PT fares.</li> </ul>

Table 1. Transport policy agendas in Brussels.

reviewing and rearranging the transport network in a more “intelligent” and “rational” manner – as reflected by the statement from a member of the regional mobility administration that opens this article. Transport engineers and economists are envisioned as “experts” primarily responsible for this task, with no or very little involvement of “non-expert” inhabitants and passengers. For the proponents of the neoclassically framed policy agenda, including regional transport companies that operate in Brussels territory,<sup>4</sup> “participatory procedures are too complicated; although participation is a question of common sense, and you have to include people from the beginning, [ . . . ] if you have to do it five times over and over again, it gets too complicated.”<sup>5</sup> Further understanding of congestion as detrimental to Brussels’ economic growth leads to a legitimization of increasingly entrepreneurial and socio-spatially selective conceptualizations of transport. They envision mobility as a place-asset for urban attractiveness and competitiveness, advocating a strong spatial focus on “key corridors and areas”<sup>6</sup> that include the European district, the high-speed-train Brussels South station, and the railway link to the Brussels International Airport. At the same time, the entrepreneurial transport agenda emphasizes the necessity to increase mobility opportunities for specific social groups such as the “creative,” “visitor,” or “middle” class. Accordingly, expanding the metro network – acclaimed as the most “efficient,” “profitable,” and “modern” mode – is identified to be the ultimate solution for PT, at the expense of “insufficiently performant” surface trams and buses. The neoclassical framing is clearly present in the narrative of one of the regional transport companies, who declare that “the tram network is limited in terms of its capacity, and once its limits are reached, one must shift towards metro construction – it’s mathematical.”<sup>7</sup> Furthering the development of car infrastructure and continuously opposing to establishing car tolling or restrictive tax systems, this agenda aims at “liberating” urban space for a more fluid car circulation. High investment and mainte-

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<sup>4</sup> There are three regional public transport companies operating in Brussels: The Flemish Transport Company (Vlaamse Vervoersmaatschappij De Lijn), the Brussels Intercommunal Transport Company (STIB), and the Walloon Regional Transport Company (Société Régionale Wallonne du Transport – TEC).

<sup>5</sup> Interview with a member of the board of directors at one of the regional public transport operators

<sup>6</sup> *Ibid.*

<sup>7</sup> Interview with a member of the board of directors at one of the regional public transport operators.

nance costs of new metro and car infrastructure are expected to be balanced by entrepreneurial financing tools such as public–private partnerships. The neoclassical framing thus legitimizes the car-dominated status quo, as it exemplified by the local branch of the liberal party (MR), who contend that “in the current context, the car for a large number of people remains an indispensable instrument, irreplaceable for professional or personal reason, whether one lives in the city or the periphery” (MR, 2014, p. 7).

The thus established neoclassical agenda is supposedly contested by increasingly more vocal calls for “sustainable” transport policy and practice. However, the recently emerged sustainable concerns to a large extent reverberate the neoclassical formulations centered upon the problem of car congestion, even if perceived not as a result of inefficient infrastructure, but as a major consequence of the predominance of car-based mobility patterns in Belgium. The high share of car use in journeys to and from Brussels amounts to 60%, the motorization rate remains high, and approximately 15% of cars registered in Belgium are company cars (Carolien & Michiels, 2014). These factors have been held responsible for the diminishing of the quality of PT service and, as a result, having a negative impact on the urban environment. Interviews with local academics, representatives of the regional government, PT operators, and citizen groups reveal widespread resonance of the “sustainable” vision in which transport policy incorporates the notions of polycentricity and proximity, prioritizing the development of PT and “soft” modes of transportation (e.g. bicycles). The transition towards a “convivial, attractive [and] livable city [. . .] for different people” is to be achieved primarily via “positive” behavioral changes, rather than through a reorientation of social, economic, and political agendas that are primarily responsible for rendering transport and mobility “unsustainable.”

The sustainable framing that resonates in Brussels policy agendas largely disregards the socioeconomic underpinnings of transport reality. It envisages transport policy making as a process that is predominantly depoliticized, consensual, and conflict-less, using citizen participation to lubricate the pathway towards “win-win” mobility projects. Moreover, similarly to the neoclassical agenda, the sustainable perspective downplays the social costs that the improvement of transport infrastructure may generate (e.g. gentrification):

Even if beautification of public space through investment in transport may create real estate surplus value and may possibly be accompanied by a complete change of population as a result of rent increase, [one] cannot oppose the return to the city of the highly- educated and high-salaried population [or] accept the impoverishment of neighbourhoods which more and more resemble ghettos.<sup>8</sup>

"Sustainable" solutions proposed for Brussels are further predominantly technological and display support for nearly all transport modes, as they include the development of the metro network paired with surface tram and bus infrastructure, pro-pedestrian planning, and improvements of bicycle facilities. An urban tolling system is discussed to limit the share of car usage, yet important questions about its potential audience, form, and price are rarely raised and generally framed as technological challenges. Slightly more out-of-the-box proposals include an aerial metro, urban funicular, urban drones, motorbike taxis, and auto rickshaws. Calls for infrastructural development are accompanied by ideas for "soft" policies. They embrace a variety of ideas, from providing better information about mobility options (including creation of regional mobility "info-points" and "mobility coaching"), and encouraging companies to outline "mobility plans," to distributing taxi or bicycle premiums to discourage the use of company cars, and promoting telework or tele-shopping to reduce mobility needs. However, this plethora of solutions reflects a lack of genuine political will to favour any specific mobility patterns. Exemplifying a clear resonance of sustainable academic approaches to transport and mobility, Brussels' sustainable transport agenda continues focusing on the immediate results of car dominance, while failing to engage with socioeconomic and political causes behind car-based mobility. As a result, it does not provide a comprehensive critique of the neoclassical perspective on transport policy and practice. The conversation between the neoclassical and sustainable agendas only appears to be productive. Although each of them frames transport and mobility issues in a different way, they both join their forces to solidify and further de-politicize the transport agenda, limiting the horizon of local academics and policy makers alike.

The thus locally assembled neoclassical-sustainable orthodoxy, upon which the transport status quo in Brussels rests, has been addressed head-on by a number of political economic analyses. According to them, car dominance in Brussels is related to fundamental socioeconomic and spatial in-

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<sup>8</sup> Interview with a mobility expert at one of the local French-speaking universities.

equalities. The continuous political and infrastructural support for car-based mobility – embodied by the neoclassical framing and ineffectively challenged by the sustainable agenda – appears to disregard the fact that 35.2% of Brussels' households that do not own a car, and 40.9% do not possess a bicycle (K. Lebrun, Hubert, Huynen, De Witte, & Macharis, 2013). For a large part of Brussels' population, the dependence on PT thus appears not as a question of choice, but of necessity. The access to mobility is thus socioeconomically uneven, as PT in Brussels "is very expensive and every year the fares are higher, increasing twice faster than inflation."<sup>9</sup> The joint pressure from the neoclassical and sustainable agendas for a metro-based development of PT network is further revealed to produce spatial inequalities. Outside the metro corridors, access to PT remains low, inducing an ever-increasing amount of transfers, which in turn attracts many passengers back to their cars. Political economic reflections further identify car-based mobility as one major factors facilitating continuous urban sprawl and consequently impoverishing Brussels by narrowing its residential tax base. They denounce entrepreneurial trends in transport that by centering upon network capacity and profitability call for privatization and liberalization, and thereby pressurize PT operators to exercise financial cuts and worsen working conditions.

This perspective fully resonates with the political economic framing of transport and mobility challenges and reveals the essentially political character of transport problems that "do not simply call for technical responses concerning optimization by this or that parameter [...], but equally for mediation and choice which require an essentially political decision" (Macharis, Dobruszkes, & Hubert, 2014, p. 10). While thus formulated agenda may at times appear quite fragmented, it further allows to observe the intricate relationship between transport policy and voting patterns. As explained by local academics,

mass transport system carries many captive users, i.e. poor people without much political clout, immigrants, and young people, who do not vote [whereas] the people who drive cars belong to a broader and on average more elevated socio-economic spectrum, which doubtless means that they are guaranteed better "access" to their local elected officials (Courtois & Dobruszkes, 2008, p. 18).

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<sup>9</sup> Interview with a mobility expert at one of the local Dutch-speaking citizen associations.

Passengers and users are thus approached as citizens and political agents that have the right to partake in a transparent process of creating transport policies and infrastructure, "for instance by having passenger representatives joining STIB [Brussels Intercommunal Transport Company] and SNCB [National Railway Company of Belgium] bodies."<sup>10</sup> Mobility is therefore envisioned as an essential public service and fundamental common good conditioning one's access to housing, education, employment, and leisure, rather than being conceived a market commodity. Instead of proposing singular solutions, the critical agenda has put forward a holistic, radical alternative to the car-based mobility mediated by metro-based PT network (L. Lebrun, Carton, & Hubert, 2009). For the local proponents of the political economic approach, "surface [PT] should be the priority. In the city where poor people take public transport and richer people use the car [...] [we] would rather have surface trams, instead of putting public transport underground and leaving the surface for the cars."<sup>11</sup> This agenda calls for a (i) densification of surface tram network providing direct and transversal inter-neighborhood connectivity and maximizing socio-spatial access for the great majority Brussels' population; (ii) simultaneous substantial reduction of car infrastructure and introduction of socially sensitive urban tolling system co-financing PT development (and possible reduction or deletion of fares).

## 6. From agendas to circuits of knowledge

While the frames provided by three academic approaches to urban transport and mobility appear to resonate with the three distinct political agendas in Brussels, their influence on actual policies differs greatly. In other words, these agendas are inserted into circuits of knowledge backed by actors and institutions controlling uneven resources. Henceforth, we look here at the typologies of stakeholders supporting each agenda, in order to identify specific circuits of knowledge. To do so, we refer to Healey's metaphor of a triple intellectual, political, and infrastructural fix (Healey, 2013) as a means

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<sup>10</sup> Interview with a mobility expert at one of the local French-speaking citizen associations.

<sup>11</sup> Interview with a mobility expert at one of the local Dutch-speaking citizen associations.

of delineating how stakeholders' positions and interests cluster around transport agendas in Brussels.

The intellectual–political–infrastructural fix that shapes transport reality in Brussels along the neoclassical lines is particularly apparent. The intellectual fix supporting the neoclassical circuit is largely provided by engineers employed in PT companies and mobility authorities. While having made virtually no contributions to academic debates, engineers have acted as “experts” for successive governments since the 1960s, helping to frame a political fix around metro-based PT network, thereby arguing that public space be liberated for car infrastructure (Tellier, 2010). This consensus continues to shape contemporary transport policies in Brussels (Zitouni & Tellier, 2013) and is supported by official programs of the liberal, Christian democrat, and socialist parties alike. They are joined by the technology industry and employers' federation (Agoria), the regional chamber of commerce (BECI), and a number of real-estate actors (e.g. Cofinimmo). While BECI claims that “in certain zones 30% of traffic is related to looking for a parking spot” (Willocx, 2013, p. 10), Agoria points out that mobility problems “make Brussels less attractive for business location and personnel recruitment [...] and are often cited by companies (70%) as possible reason to leave [Brussels].”<sup>12</sup> Reducing car infrastructure is considered detrimental to the Brussels' “business climate,” as according to Cofinimmo, “good accessibility by public transport is not sufficient to guarantee that office spaces will easily find tenants” (STIB, 2012). The regional government shares this perspective, considering mobility as the main factor behind economic growth. Transport “serves not only to travel, but to consume.”<sup>13</sup> It constitutes an instrument of urban competitiveness, therefore validating a socio-spatially selective mobility policy framed in the regional sustainable development plan (Brussels-Capital Region, 2014) and regional mobility plan (Bruxelles Mobilité, 2011). The latter document frames transport as a primarily technical, “expert-led,” and depoliticized issue. It further combines elements of the engineer-concocted orthodox intellectual fix with the entrepreneurial consent for risk-prone financing schemes and the emphasis on international connectivity. Neither Bruxelles Mobilité nor any of the local PT operators seem genuinely committed to including the passengers' perspective in transport-related decision-making, as no mobility

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<sup>12</sup> Own communication with a representative of Agoria.

<sup>13</sup> Interview with a former member of the Government of the BCR.

plan or policy report envisions citizen groups as active partners in the transport debate. Instead, inhabitants are conceptualized merely as passive users of transport infrastructure:

We have to be honest: while an effort has to be made to involve citizens [in transport projects], at some point authorities must assume their responsibility and say, well, we have heard all your points, we have made some decisions, and now we will act on them, so once [the project] is realized, and you're not satisfied, don't vote for me anymore. [. . .] But in Brussels citizen opposition is a national sport, and authorities start to back-pedal as soon as neighborhood groups or shopkeepers organize themselves.<sup>14</sup>

This approach is reflected by PT operators such as STIB and SNCB, who to an increasing extent operate within the punctuality oriented logics of "management contracts" signed with regional or federal authorities. Consequently, for STIB, "the recipe is simple: [as] the commercial speed [of the metro] is high and can reach up to 30 km/h, its regularity is not undermined by traffic congestion, [and] the frequency of its circulation is high" (STIB, 2009, p. 25). Metro development is thus enthusiastically hailed as "utopia that becomes reality."<sup>15</sup> PT operators further admit that in the time of austerity "a switch from guaranteed access to basic mobility [towards] a more demand-driven organization of transport offer"<sup>16</sup> should be considered. This logic justifies linking transport infrastructure to land speculation, in the hope of producing surplus value that could effectively replace public subsidies. The political consensus that centers on metro as the cornerstone of Brussels' PT network is mirrored by a multilevel commitment to continue building car infrastructure. The federal authorities subsidize the construction of both road tunnels and a new metro line, the latter project having been jointly prioritized with the regional government. On the municipal level, the City of Brussels has recently considerably enlarged the pedestrian zone in the historic inner city. At the same time however, it has reduced the accessibility to this zone by surface PT and has promoted the establishment of new privately owned underground car parks served by an inner-core ring road.

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<sup>14</sup> Interview with a member of the board of directors at one of the regional public transport operators.

<sup>15</sup> *ibid.*

<sup>16</sup> *ibid.*

The dominant neoclassical circuit is seemingly challenged by three fixes recently structured around a number of "sustainable" ideas for Brussels transport. The local sustainable circuit embraces a variety of academics including mobility experts (Macharis *et al.*, 2010), sociologists (Hubert, 2008), political scientists (Damay, 2014), and urban planners. They have together worked towards establishing an intellectual consensus around the identification of car-based mobility as one of the main culprits behind the decrease of the quality of life in Brussels. The largely depoliticized banner of "sustainable mobility" is held high by the regional government. Various authorities have pledged to reduce the share of individual car usage. While the regional mobility plan (Bruxelles Mobilité, 2011) commits to decrease car mobility by 20% between 2011 and 2018, the regional sustainable development plan hopes to halve it by 2040. This objective is to be achieved through generating a modal shift to bicycles, PT, and walking. Further solidifying the sustainable circuit, various "sustainable" slogans have united nearly all political parties. Calls for improving the quality and livability of public space through transport policy have also been voiced by various citizen movements – e.g. Atelier de recherches et d'actions urbaines (ARAU, 2008), Brusselse Raad voor het Leefmilieu (BRAL, 2014), and Inter-Environment Bruxelles (IEB) – PT operators (STIB, DeLijn), as well as business and commerce representatives (BECI [Willocx, 2013]). They seem to agree that a "positive" behavioral shift towards different modes of transport should be stimulated to create a more "mixed," "creative," "attractive," and "shared" urban space. The transition towards sustainable mobility is often conceived as a depoliticized process. As a regional government representative puts it, "an 'ideological split' between the left-wing supporters of investments in tram and bus [network], and right-wing supporters of investment in metro is no longer necessary."<sup>17</sup> Thus, the neoclassical and sustainable circuits involving academics, administration officials, and activists alike come to an accord, depicting transport as "an ambitious project in which everyone is going to win,"<sup>18</sup> regardless of whether it involves instrumentalizing citizen participation and silencing the opposition. The resultant lack of infrastructural fix reflects the tendency among the federal and regional authorities, as well as the whole spectrum of political parties, to prioritize technological and infrastructural antidotes instead of social and political solutions. Their vague policy does not privilege any particular

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<sup>17</sup> Interview with a cabinet member of one of the BCR ministries.

<sup>18</sup> A website launched by Bruxelles Mobilité to promote the project of converting one of the Brussels' most used bus lines (71) into a tram line. Retrieved from <http://www.be71.be/fr/>.

mode, and by merely “responding to existing demand instead of reshaping it,”<sup>19</sup> the car-dominated status quo is sustained, if not reinforced. As a local academic puts it, “we don’t want to make any choice, and therefore too much space is left for the car.”<sup>20</sup>

The challenge of demonstrating political choices related to transport in Brussels has been taken up by intellectuals coming from disciplines as diverse as geography (Courtois & Dobruszkes, 2008; Lebrun & Dobruszkes, 2012), political sciences (Damay, 2014), sociology (Zitouni & Tellier, 2013), ethnography, and urban planning (Frenay, 2009). This critical circuit of academics has demonstrated that the current mobility paradigm in Brussels contributes to fundamental socioeconomic and spatial inequalities, as “there are people that are very mobile, while for others there exist important physical, financial, social, and cultural barriers.”<sup>21</sup> Academics have further recognized the inherently political character of transport strategies, “which should not be reduced to the results of estimations made by transport experts” (K. Lebrun & Dobruszkes, 2012, p. 12). They have consequently exposed urban regimes promoting specific transport solutions (Tellier, 2010) and called for a transport policy providing citizens with the right to access to a variety of transport modes (Lebrun *et al.*, 2013), rather than a “right to mobility” largely interpreted as unconditional “free-for-all” liberty to own and use a private vehicle. They have further denounced the link between car-based mobility and urban sprawl impoverishing Brussels. While generating 19% of national wealth, the tax Brussels receives amounts to only 8.5% of the national wealth (Frenay, 2009). At the same time, daily commuters from neighboring Wallonia and Flanders, who perform 53% of all jobs offered in Brussels (Lebrun, Hubert, Dobruszkes, & Huynen, 2012), contribute to 40% of car traffic in Brussels (Hubert, Lebrun, Huynen, & Dobruszkes, 2013). For an urban planner at one of the local universities,

this as an aberration [. . .] This means that the majority of those who inhabit neighbourhoods [close] to their workplaces make short journeys with public transport, but have to pay their travel cards in full. Meanwhile, those who live [...] outside [Brussels] and therefore don’t pay their taxes to Brussels [. . .], often have their travel cards fully reimbursed. I

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<sup>19</sup> Interview with a mobility expert at one of the local Dutch-speaking citizen associations.

<sup>20</sup> Interview with a mobility expert at one of the local French-speaking universities.

<sup>21</sup> *ibid.*

find this profoundly unfair. [...]. This also means that Brussels is under-financed.<sup>22</sup>

Some intellectuals have therefore proposed to redistribute funds from (individual) car transport to PT, for instance via an urban tolling system (Hubert, 2008). However, while these critiques have been conceptualized within a relatively coherent intellectual fix, they have not translated into a stable political consensus. This means that key administrative institutions are absent from the critical circuit. Whereas several citizen groups to a large extent agree with the intellectual critiques of orthodox and sustainable agendas (L. Lebrun *et al.*, 2009), the political parties as well as the regional government have referred to them in very selective manner, without any infrastructural outcomes.

## 7. Conclusion

This paper has presented an inquiry into the capacity of transport and mobility studies to fuel a critical agenda in the policy context of Brussels. Three approaches were understood as salient classifications to grasp what is at stake in Brussels – neoclassical, sustainable, and political economy approaches. Thus qualified, the Brussels' agenda appears to be dominated by a dual hegemonic debate between what we label as "neoclassical" and "sustainable" positions, which are in fact part of the same policy orthodoxy. This ongoing exchange between proponents of a neoclassical economy-driven approach to urban mobility on the one hand, and advocates of more socially and environmentally aware conceptualizations of transport as a key component of a "good" city on the other hand, appears to leave several key political issues out of academic discussions. Meanwhile, political economy inspired calls for revealing and analyzing these issues in view of transforming a wider spectrum of forces that contextualize transport reality, operate on the fringe of this dual hegemonic debate. While various elements of the counter-hegemonic critical perspective on urban transport exist, they remain fragmented and unable to effectively circulate and crystallize into a field reshaping trans-

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<sup>22</sup> Interview with an urban planner at one of the local French-speaking universities.

port agendas and policies. This leads to an essentially depoliticized scholarly debate about urban transport, consequently sustaining discussions around "best practices" attached to technical, environmental, or governance issues, whereas no stable political and infrastructural fix supports the critical agenda.

The immediate question raised by the case of Brussels concerns the roots of the neoclassical-sustainable orthodoxy in urban transport: while this sort of inquiry reaches beyond the scope of this paper, we urgently need to explore the precise causes and modalities of this ideological dominance. In this paper, we have argued that analyzing the relationship between academic knowledge and political agendas through instances of frame resonance in circuits of knowledge is a fruitful way of exploring how knowledge travels across the divide between scholars and practitioners. An important implication of this perspective is that the "critical" character of academic knowledge is strongly mediated by its capacity to challenge the dominant frame held by policy makers. Furthermore, thinking through frame resonance could inspire a debate about what kind of transport and mobility studies are needed to maintain their critical edge and emancipatory character (cf. Legacy, 2015). The analysis of the case of Brussels reveals that questions emerging from political economic approaches to transport and mobility may serve to critically engage with the policy field. Yet, importantly, our argument is not that the critical edge of transport and mobility studies exclusively resides in qualitative methods married to constructionist or Marxian epistemologies (Kwan & Schwanen, 2009). On the contrary, critiques can also powerfully draw on acts of strategic positivism, even though this avenue needs urgent exploration (Wyly, 2009). Therefore, in our view, the critical nature of scholarship depends on the context, together with the types of policies implemented (or not), and the types of "scientific" arguments that are utilized in framing policy reality, setting the agenda, and legitimizing decisions and nondecisions. What is "critical" is not fundamentally bound up with methodological and epistemological positions, but with its capacity to "decenter" existing policy debates.

This fundamental "situatedness" or provinciality of any critique may help us to start explaining the general frailty, fragmentation, and fuzziness of translating critical scholarship into factual critical transport agendas and circuits more universally. As a critique only exists in respect of an orthodoxy, its

capacity to travel tends to be defined by the radius of the orthodoxy it opposes. This condition highlights several issues concerning the nature of counter-hegemonic circuits of policy knowledge (Massey, 2011) and opens a new agenda for research about critical transport policies and practices. On the one hand, it entails expanding the inquiry into their circulation (Wood, 2014), looking at the motivations and resultant (in)actions of actors engaged in the critical transport circuit as well as spaces, narratives, and practices undergirding the process of spinning and mobilizing of alternative transport policy solutions (McCann, 2011). On the other hand, it highlights the issues of mutation and morphing of allegedly "critical" policy models as they migrate out of the metropolitan contexts in which they have been developed, and which often do not offer a fertile ground for critical thought and praxis (Kębłowski & Van Criekingen, 2014). Therefore, it becomes evident that if we wish to see the critical agenda materialize in actual policy and practice, we urgently need to know more about the ethnographies, sociologies, and geographies that undergird the process of their circulation and implementation.

## Acknowledgments

The authors are grateful to Kobe Boussauw, Frédéric Dobruszkes, Stijn Oosterlynck, Mathieu Van Criekingen and Michiel Van Meeteren for many inspiring comments and conversations around earlier versions of this paper. We are also grateful to the three anonymous referees at Urban Geography for their questions and suggestions. None of the above, needless to say, bears any responsibility for the arguments here, which remains our own.

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## CHAPTER 2: "ALL TRANSPORT PROBLEMS ARE MATHEMATICAL"

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## Chapter 3

**Moving past the sustainable  
perspectives on transport:  
An attempt to mobilise critical  
urban transport studies  
with the right to the city**

# Moving past the sustainable perspectives on transport: An attempt to mobilise critical urban transport studies with the right to the city

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This chapter has been submitted to *Transport Policy* and is currently under review.

## Abstract

The contemporary urban transport debate is increasingly versed in terms of “sustainable” development, placing environmental issues on the agenda. Simultaneously, however, sustainable perspectives seldom engage with the fundamentally political question of who ultimately participates in the making of those sustainable urban futures, and who ultimately benefits from them. Leaving these questions undebated, this paper argues, adds to wider trends of de-politicisation in the field of urban transport. By proposing to reconnect them with explicit political-economic considerations, we intend to mobilize and strengthen “critical” perspectives on urban transport. To do so, we develop a framework for studying transport practices and policies inspired by Henri Lefebvre’s conceptualization of “the right to the city,” which serves as a key resource to reignite *cui bono* questions.” We illustrate the framework with the empirical example of a “pedestrianization” project in Brussels, a salient example of a “sustainable” transport policy. We thus highlight the urgency of re-embedding transport within urban studies by seeking and revealing political-economic contradictions that shape mobility policies and practices interwoven with urban development dynamics.

## Keywords

transport policy, urban transport, sustainable transport, pedestrianization, right to the city, Brussels

## **1. Introduction: the weakness of critical perspectives on urban transport**

In January 2014, the municipal authorities of the City of Brussels announced their plan to extend the pedestrian zone in the historic inner-city. Their project aspired to become much more than a major intervention in terms of mobility. While it involved closing off to motorized traffic a part of a Haussmannian boulevard that thus far functioned as major traffic artery cutting across Brussels' city centre, it also incorporated a complete refurbishment of public spaces re-designed to produce a new centrality around a pedestrian street attracting shoppers, festival-goers and tourists. According to its municipal proponents, the project constituted a bold move in terms of urban development and city marketing, as it intended to give the "capital of Europe" a "new heart" that the mayoral office has dubbed "Brussels' Times Square" (Colleyn 2013).

In spite of these aspirational slogans, "le piétonnier," as it is often called by local media, has sparked a heated debate since its inception. On the one hand, it has been forcefully praised by several citizen movements and public intellectuals for undermining the dominance of car-oriented planning in Brussels, and hence for heralding the vision of a more "sustainable," "attractive" and "liveable" city centre (Corijn 2015; Van Parijs 2012). On the other hand, it has been heavily criticized by numerous and multifaceted groups of shopkeepers, local residents, and other citizen organisations. When focusing on questions of mobility and transport, their critiques have inter alia highlighted the problematic issues of transferring car traffic from the central boulevard towards a network of narrow streets in adjacent neighbourhoods, and relocating bus stops to the limits of the new pedestrian zone, thereby decreasing accessibility to the city centre for public transport users. When offering more general critical evaluations, opponents of the pedestrianization project have pointed out its anticipated detrimental impact on local business, as well as its prospective effect on accelerating speculative real estate projects, likely to put incumbent low-income inhabitants under increasing threat of displacement (ARAU 2015; Platform Pentagone 2015).

Beyond the case of Brussels, the "pedestrianization" of urban boulevards is a salient example of a "sustainable" transport policy (Reigner, Brenac, and Hernandez 2013). As it gains popularity across a variety of urban

contexts, it is analysed primarily against its impact on local economy and transport situation (Boussauw 2016; Hass-Klau 1993). At the same time, it is promoted as instrument helping municipalities to boost their “attractiveness” and “liveability,” which are supposed to profit a wide spectrum of social groups and urban neighbourhoods (Sandahl & Lindh 1995). We argue, however, that while it is important to understand how policy templates such as pedestrianization affect traffic flows and retail dynamics, they also require detailed investigations into the political economic choices that underpin them (Özdemir & Selçuk 2017). This involves revealing and analysing questions related to uneven distribution of transport-related costs and benefits in economic, political or symbolic terms (Aldred 2012; Blickstein 2010; Fol, Dupuy, & Coutard 2007; Graham 2000; Kaufmann, Bergman, & Joye 2004).

In our view, the extension of the pedestrian zone in Brussels’ historic core accurately illustrates a number of key political economic dimensions that undergird contemporary transport policy and practice. It exemplifies a project that at first sight appears as a harbinger of a “sustainable” mobility framework, yet actually brackets questions of uneven development, gentrification, class politics, and urban democracy. Beyond this particular case, these political economic dimensions seem largely absent from most of transport debates, as they seem to be dominated by an exchange between two main strands of academic literature. As demonstrated by Kębłowski and Bassens (2017), a first perspective conceptualises urban passenger transport issues in terms of utility, efficiency and economic growth, all three expected to be achieved in a “neoclassical” fashion, by applying “rational” planning tools such as econometric computation and forecasting models (Girnau and Blennemann, 1989; Grant-Muller *et al.*, 2001). By contrast, “sustainable” transport and mobility perspectives (e.g., Banister 2008; Banister and Hickman 2013) highlight environmental and social problems related to urban transport and project the latter as a key component of a “good city”: dense, diverse, economically vibrant, socially cohesive, and environmentally-friendly.

However, despite its commitment to integrate social and environmental perspectives with transport engineering and econometrics, the sustainable approaches have not sufficiently engaged with explicitly political issues shaping the relationship between transport and urban development (Béal 2017; Pow and Neo 2013; Schuetze and Chelleri 2015), and has therefore con-

tributed to a significant de-politicisation of the transport debate (Kębłowski and Bassens 2017; Reigner 2016). In our view, this indicates that there is room for another strand of theorisations and approaches that can contribute to a better understanding of political economic issues underpinning transport. We refer to these approaches as “critical,” as they derive from critical research in urban studies (Brenner 2009), in their explicit focus on social, political, and economic relations as well as on urban regimes and regulatory frameworks shaping urban policies and practices (Schwanen, 2016; Shaw and Sidaway, 2011). Up to date, however, such critical perspectives on transport remain fragmented and their fuzziness and frailty is mirrored by the lack of coherent “critical” political agenda in metropolitan areas. The main objective of the paper is therefore to re-politicize the debate on transport and mobility by re-connecting it with explicit political-economic considerations. Our attempt to mobilize and strengthen critical urban transport studies hinges on the development of a framework for studying transport policies. To do so, we find inspiration in contributions that have proposed to critically scrutinize urban policies through Henri Lefebvre’s (1996 [1968]) conceptualization of “the right to the city” (RTTC) (Belda-Miquel, Peris Blanes, and Frediani 2016; Kębłowski and Van Criekingen 2014). While few studies have applied the Lefebvrian perspective in the particular field of transport (Corsín Jiménez, 2014; Jouffe, 2010; Kusters, 2016; Levy, 2013; Scott, 2013), we hope to demonstrate its relevance as a heuristic inspiring a variety of explicitly political economic questions that may be asked about diverse transport policies and practices, and thus directing research about transport into pathways overlooked in the sustainable transport and mobility literature.

Translated into an operational framework for studying urban transport, RTTC inspires, first, an inquiry into the capacity of transport instruments such as pedestrianization in terms of advocating citizen participation in framing transport policies and practices. Second, referring to RTTC involves scrutinising the potential of transport practices in terms of transferring power over the appropriation and production of urban space away from politics of urban regimes towards politics of the inhabitants. Third, the use of RTTC as analytical framework highlights the importance of investigating the extent to which transport policy may relate to and challenge broader agendas of urban development and governance. Fourth, RTTC consequently places transport instruments in a long-term, utopian perspective—instead of reducing them to blueprints and “fixes” of “fast” policy-making (Marsden and Stead 2011). By

proposing to study transport policies and practices against this framework we intend not only to reveal a series of political-economic aspects that underpin and mould them, and to highlight their achievements and deficiencies, but also help to systematize recent efforts at conducting critical investigations into urban transport.

The paper is structured as follows. The next section discusses the largely de-politicized condition of urban transport debate. Section 3 provides a non-exhaustive review of approaches that have been critical of this condition, and, in the light of their frailty, explores how a Lefebvrian theoretical lens could act as a catalyst to mobilize critical urban transport studies. Inspired by his concept of RTTC, section 4 develops a theoretical framework for analysing transport policies and practices, in which the project of pedestrian zone in Brussels serves as an empirical vignette. Its analysis leads to a conclusion (section 5) about the fundamental role of political-economic dimensions in shaping contradictions of contemporary transport policies which, while seemingly limited to the field of mobility, appear to invoke a variety of questions relating to urban development agendas writ large. Hence, we make a plea to re-embed transport within the field of urban studies to analyse its connections to wider urban development dynamics.

## **2. A de-politicized debate on urban transport**

In our view, the transport debate is increasingly versed in terms of “sustainable” development (Banister 2008; Hickman et al. 2013; Low and Gleeson 2003; Tight et al. 2011). Although this perspective emphasizes a series of social and environmental issues, it appears to depict the process of transport agenda-setting as a predominantly technical, not political matter. Transport policies are therefore described as responding to technical or technocratic challenges, hinging on implementation of “rational” solutions and technological “practices” developed through matter-of-fact tasks and procedures. The fundamental role of social and political structures in transport research, policy and practice (Debnath *et al.*, 2014; Eichhorst *et al.*, 2011; Holden and Norland, 2005) is further concealed by the rising popularity of the concepts

of “governance,” “urban design,” and “smartness,” which have become common ingredients of sustainable mobility strategies. Thus, the transport debate seems to employ what Marcuse (2015) calls “one-dimensional language that closes off examination of critical questions as to what is really going on in the world. Its political content is wiped out [as] it supports the status quo, implicitly suggesting that, if there are difficulties, they are subject to correction within existing structures and with existing means” (153-4). Paradoxically, turning a blind eye to the political aspects may obfuscate an essentially political, neoliberal transport agenda (Aldred 2012). This trend hinges on three main components of urban transport policy that are, albeit to different degrees, and in variegated ways, observable in cities around the globe.

First, it upholds the neoclassical perspective according to which territorial connectivity can be monetized and maximized through more fluid traffic management to play central role in growth-oriented urban agendas. Mobility is thus no longer primarily conceptualized as a framework for moving people and goods, but may also function as key component of public-private land rent valorisation strategies, and a territorial asset in inter-urban competition for external financial and social capital (Medda 2012). This approach conforms to the logic of prioritizing supply-side interventions aimed at improving market conditions for investors, and leads various urban actors to attempt to “re-brand” and “re-imagine” their cities by seeking “fast solutions” and “policies-that-work”—a process that has embraced transport policies (Marsden and Stead 2011). Yet the repertoire of ready-made “recipes” that circulate among cities—often irrespective of contextual differences—is greatly limited. The resultant standardization of urban transport policy models translates into construction of strikingly similar transport infrastructure reproduced in a near-uniform fashion across a plethora of urban contexts. In France, for instance, this phenomenon has led urban activists to raise questions about the supposed social and economic benefits of such infrastructural developments, and to denounce them as “major useless projects” (Camille, 2015). A number of their cases can be found in “best practice” urban transport portfolios, in which next to “pedestrianisation” of urban boulevards policy-makers may find *inter alia* the idea of creating bicycle-sharing systems, installing congestion charging, or constructing of large-scale “starchitectural” transport hubs (e.g. railway stations and airports), which are often embedded in urban renewal and embellishment programmes. Meanwhile, the ever-increasing mobility of transport policy ‘fixes’ and ‘fads’ is inversely re-

lated to the rather slow circulation of knowledge about potential socio-spatial costs they may generate, such as real-estate speculation or gentrification (Özdemir and Selçuk 2017; Reigner et al. 2013).

Second, formulating transport studies as a de-politicized field has helped deepen various forms of spatial splintering. Investment in infrastructural “spatial fixes” (Harvey, 2001) linking “premium networked spaces” (Graham, 2000), identified as one of key policy schemes, leads to improvement of connectivity between strategic nodes and corridors that is expected to generate “trickle-down” and “spillover” effects. Furthermore, while historic urban cores are designated to be “protected” or “saved” from the automobile, large-scale car infrastructure including expressways, parking lots and logistics parks is concomitantly developed in suburban areas. Spaces of mobility in inner-cities are subject to a further vertical split: while ‘soft’ modes and public transport are given a more prominent position on the surface, highways and car parks are often moved into the underground, hence keeping issues of automobility out of sight and untouched (Reigner *et al.*, 2009).

Third, the de-politicisation of the transport agenda has entailed an exacerbation of transport-related socio-spatial inequality. By paying insufficient attention to the highly uneven character of day-to-day choices made between different modes, destinations and lifestyles, the proponents of “sustainable” transport (Banister 2008; Banister and Hickman 2013) have contributed to a rationality that holds individuals accountable for both creating and solving transport problems. As (Reigner, 2016: 5) puts it, “through their behaviour and choices, individuals are considered as being the source of problems (air pollution, road insecurity, traffic congestion, etc.) while holding the keys to solving [them].” This perspective operates in tune with a shift of the function of public transport from providing equal accessibility to all, to increasing transport options (e.g. vis-à-vis the car) for the benefit of social classes that are highly mobile already (Geurs *et al.*, 2009). Public transport is thus increasingly conceptualized not as a common good, but rather as a service first catering for selected social groups and users—the more affluent, privileged city residents and users, the “visitor class” (Eisinger, 2000), or the “creative class” (Florida, 2002)—who are offered better access to a wider variety of “mobility solutions” while the overall quality of transport services diminishes and becomes more uneven (Dibben 2006). Critical transport re-

searchers have thus demonstrated how transport projects that supposedly contribute to urban “quality of life” and promote a “return” to the “dense” city, often hinge on a hierarchisation of urban classes, behaviours and territories in the name of urban marketing, allowing to disregard social and political costs generated (Bonsall and Kelly 2005; Church, Frost, and Sullivan 2000; Jones and Lucas 2012; Reigner et al. 2013).

### 3. Towards a critical urban transport policy framework

As the perspective on transport as contributor to urban sustainability does not necessarily propose broad, explicitly political conceptualisations of transport issues, we argue that it leaves space for what we identify as “critical” approaches. A key question—seldom explicitly asked in literature on sustainable transport—is what kind of power relations and broad urban development agendas are to be sustained by the policies launched under the sustainable banner. Relatedly, sustainable transport solutions are often implicitly assumed to address the public interest and benefit all social classes, despite increasing evidence that their impact can be unevenly distributed in both social and spatial terms (Reigner et al. 2013). Outside the sustainable approaches to transport, however, numerous theoretical contributions have explicitly recognized socio-political processes, power relations and dynamics, norms and regulatory frameworks that condition mobility (Aldred 2012; Blickstein 2010; Enright 2013; Fol et al. 2007; Henderson 2006; Yago 1978). A particularly influential addition to “critical” approaches to urban transport theory is the proposal to recognize the “mobility turn” in social sciences (Sheller and Urry 2006). By joining perspectives provided by social sciences, geography, cultural studies, political studies and ethics (Cresswell, 2010; Sheller, 2014; Urry, 2000), the proponents of the mobility turn question the spatially fixed and scalar perspective on mobility. These proponents acknowledge the “need to imagine questions, methodologies, and epistemologies beyond those bequeathed to us by economists and civil engineers” (Hanson, 2006: 232), proposing *inter alia* to perceive mobility as an activity that has a value in itself (Jain and Lyons, 2008). However, they have seldom engaged in debates about social unevenness of mobility, let alone have studied its relation with the issue of class.

Following Urry's (2002) work on mobility-related inequalities, Kaufmann et al. (2004) further conceptualized mobility as a form of capital—termed “motility”—that is unevenly distributed among social classes and individuals. Accordingly, speed and mobility may constitute a discriminatory norm (Fol et al., 2007) that assumes a controlling and disciplining role (Borja et al., 2013; Reigner, 2016), and heralds a highly individualistic and de-socialized vision of ‘free-to-move’ subjects put under ever-increasing pressure to become ever-more flexible and mobile citizens, workers and consumers (Cass and Manderscheid, 2010). A variety of contributions to transport studies have scrutinized how this pressure relates to a wide range of social issues including class, gender, race, ethnicity, disability and age (Clark and Wenfei 2013; Golub, Marcantonio, and Sanchez 2013; Law 1999; Levy 2013; Preston and McLafferty 2016; Sheller 2014). Others have identified transport as a common good and major contributor to social justice, rather than to market it as a commodity for which different social groups and territories may have to compete (Gössling, 2016), and a comprehensive framework for a just re-distribution of transport accessibility based on “the criterion of need” instead of the criterion of demand (Martens, Golub, and Robinson 2012). This approach resounds in the call for the “right to mobility” (Blickstein, 2010; Cresswell, 2006)—primarily understood as the right to access transport infrastructure—as well as in the call for “the right to immobility” (Cass and Manderscheid, 2010; Orfeuil, 2011), which offers a critique of mobility as a key individual norm under capitalism.

However path-breaking the recent theoretical contributions to critical approaches to transport may be, in our view they have not yet provided a sufficiently comprehensive and systematic framework to assess urban transport policies. We argue that Henri Lefebvre's (1996 [1968]) notion of RTTC may be fundamental in this regard, inspiring a coherent, theoretically robust and empirically applicable framework. Looking at urban transport through Lefebvre's lens—a project that draws inspiration from Corsín Jiménez (2014), Jouffe (2010), Kusters (2016), Levy (2013) and Scott (2013)—we hope to connect the fragmented critical approaches to transport with the tradition of critical urban studies. According to Brenner (2009), their main tenet lies in the continuous strive to expose power-relations underpinning urban policy and practice and to “reject instrumentalist, technocratic and market-driven forms of urban analysis that promote the maintenance and reproduction of extant urban formations” (204). Hence, their aim is to “excavate possibilities

for alternative, radically emancipatory forms of urbanism that are latent, yet systemically suppressed” (Ibid.)—a mission statement that we adopt to contribute to a genuine re-politicization of the debate on urban transport policy and practice. To achieve this, we identify the primary relevance of RTTC in Lefebvre’s insistence that one of key attributes of any urban theory or policy claiming a genuinely “critical” character would lie in foregrounding the use value of urban space to the detriment of exchange values (Kuymulu 2013; Lefebvre 1970). Thus conceptualized strategy dedicated to transfer power over the appropriation and production of urban space out from the market’s and state’s hands, to those of the inhabitants (Purcell, 2014), opens the path to genuinely re-politicize urban issues.

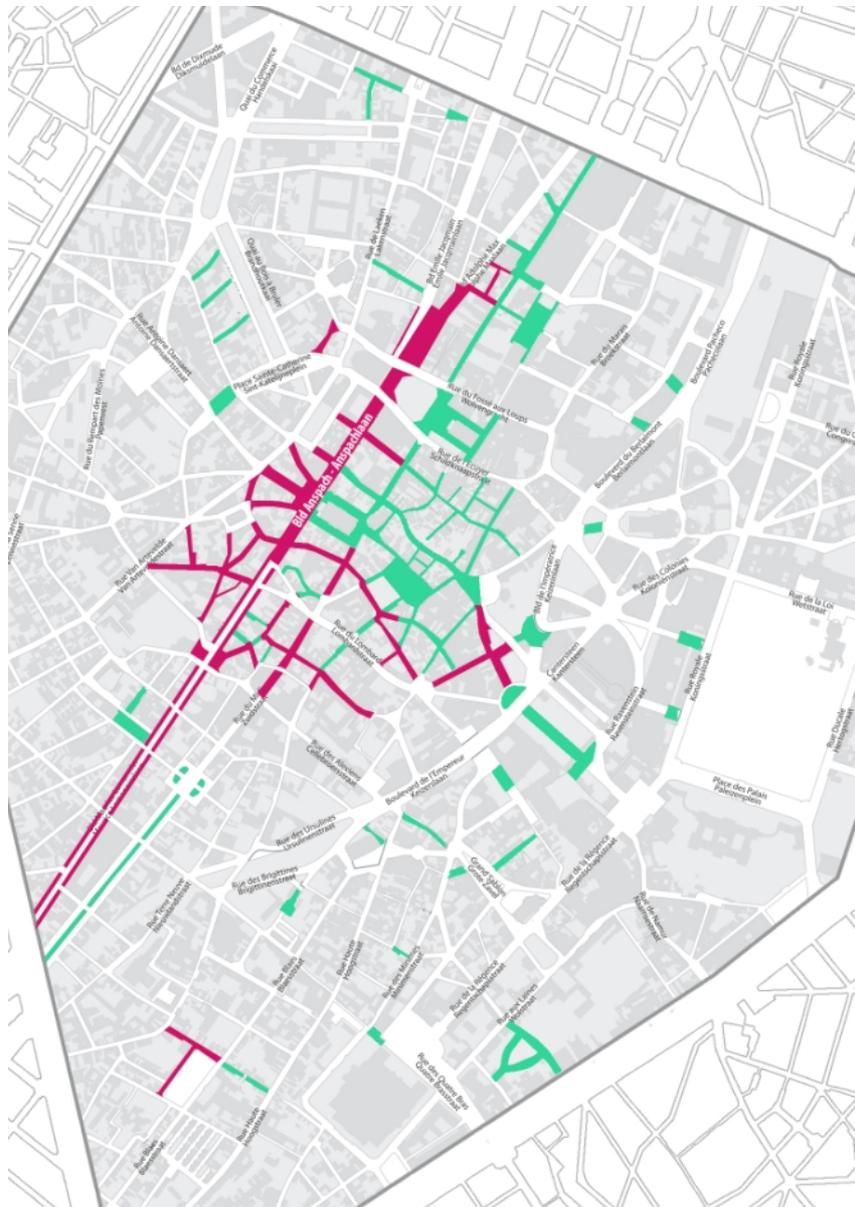
The point here, however, is not to advocate RTTC as another addition to the list of existing liberal-democratic rights to separate socio-economic aspects such as housing, natural resources, aesthetics, education, healthcare or, last but not least, to transport and mobility (Kuymulu, 2013). Neither is it our ambition to engage in a debate about what RTTC is (or is not), by whom it should be claimed (and by whom not) and how should it be put into practice (or not), or to transpose Lefebvre’s theory onto banners calling for creating new “ideal-type” practices that would “embody” or “realize” the right to the city. Rather, we feel encouraged to use Lefebvre’s theory as a heuristic that allows to detect political-economic contradictions underpinning transport, and to systematize critical transport studies. To this end, we propose an analytical framework that builds on RTTC as a radical antidote that cuts through discursive veils surrounding material effects of transport agendas, and consequently inspires questions that are seldom asked about transport policies and practices—of which the strategy of “pedestrianizing” urban spaces is but one salient example.

#### 4. A RTTC-inspired framework for transport policy analysis

The framework we are proposing below refers to four fundamental elements of RTTC combined with insights from contemporary critical literature on citizen participation in urban planning as an integral element of Lefebvre's conceptualisation. The theoretical discussion about political-economic contradictions that the framework helps to detect is illustrated with a critical de-construction of the empirical example of pedestrianization project in Brussels (see *Table 1* and *Figure 1* below).

Right to the city	Transport policy
Enabling appropriation and production of urban space by inhabitants	<ul style="list-style-type: none"> <li>• <i>Inclusive</i>: responding to unequal capacities among potential participants</li> <li>• <i>Reconciling</i> institutional/top-down and non-institutional/bottom-up/elements</li> <li>• <i>Deliberative</i>: providing space for conflict/dissensus and deliberation/consensus</li> <li>• <i>Interactive</i>: approaching participation as a right involving participants in a mutual learning experience</li> </ul>
Challenging existing configurations of power	<ul style="list-style-type: none"> <li>• <i>Redistributive</i>: transferring significant power towards city-dwellers; co-created with and by, not for them.</li> <li>• <i>Political</i>: as opposed to de-politicised, consent-manufacturing techniques)</li> </ul>
Concerned with all aspects regarding the urban environment	<ul style="list-style-type: none"> <li>• <i>Holistic</i> and <i>multi-scalar</i>: concerned with the whole (urban) society and territory, reaching beyond administrative boundaries, parochial spaces and interests</li> <li>• <i>Effective</i>: producing tangible, yet not forced outcomes</li> </ul>
Utopian	<ul style="list-style-type: none"> <li>• <i>Transformative</i>: producing a lasting change of power relations that reaches beyond existing institutional frameworks</li> </ul>

*Table 1.* A RTTC-inspired framework for critical analysis of transport policies and practices.



*Figure 1.* The extended pedestrian zone in Brussels' historic inner city (in pink), as presented in January 2014, compared to the existing pedestrian area (in green). Source: Ville de Bruxelles, "Un nouveau cœur pour Bruxelles" ("A new heart for Brussels"), Press dossier, January 31, 2014.

#### **4.1. Participation: Enabling appropriation and production of urban space**

Given the centrality of users and use values of urban space in Lefebvre's work, participation is an undoubtedly key component in any possible operationalization of his call. While participation may help to widen the spectrum of stakeholders in transport-related formal decision-making (Batterbury, 2003), its relationship with transport policy remains weak (Legacy, 2015). Moreover, as anticipated by Lefebvre, experiences of citizen involvement in transport policy-making have now proven to entail highly controversial practices in many different urban contexts. This has even brought some critical scholars to demonstrate that transport agendas often harness citizens' participation (Kaufmann, Jemelin, Pflieger, and Pattaroni 2008) in "thinly veiled attempts at securing legitimacy for and cooperation with policies already adopted that favour capitalist growth" (Silver et al., 2010: 454; see also Huisman, 2014). This perspective has often been adopted by the proponents of the sustainable approaches to transport (Epprecht, von Wirth, Stünzi, and Blumer 2014; Isaksson and Richardson 2009), for whom the primary goal of citizen participation is to build acceptability for "good" policy solutions, rather to facilitate a genuinely political debate in which a variety of transport scenarios could be considered. While transport academics have discussed the applicability of diverse participatory instruments (Stewart 2017; Wahl 2013), less attention has been paid to the social and political dynamics that underpin these techniques.

Contra utilizing citizen participation as political instrument for legitimacy-building and consensus-forcing, the concept of RTTC provides a lens through which transport is assessed against its capacity to become geared towards the appropriation and production of urban space by its inhabitants. The notion of appropriation stretches far beyond the possibility for urban dwellers to physically occupy existing urban space (Mitchell, 2003). According to Lefebvre (2003 [1970]), appropriation introduces a fundamental change in terms of how urban space is produced. It involves a radical transition from "abstract space" dominated by its economic function and exchange values to "differential space" in which use values are the centrepiece (Lefebvre 1966). Considered from this standpoint, transport constitutes "a use value that has become a necessity for urban inhabitants" (Levy, 2013: 12). This entails scrutinising transport policies against their capacity to contribute to a

strategy that Lefebvre calls *autogestion*. The term—which literally means “self-management” but perhaps is better translated as “workers’ control” (Brenner and Elden, 2009)—denotes a process that introduces citizen control of the city by and for its citizenry. The control of decision-making and consequent radical decentralisation of spatial governance is envisioned to regard the totality of urban issues—including those related to transport and mobility.

Tracing *autogestion* in transport includes inquiring into the inclusivity of the transport debate, as well as its potential to directly respond to diverse and unequal needs and capacities among potential participants. This means posing a fundamental question about the audience of transport policies and practices. Studying inclusivity further implies analysing the extent to which a participatory process surrounding transport is interactive by embracing participants—citizens and experts—in an empowering mutual learning experience approached “as a right, not just the means” (Pretty, 1995: 1252). This further involves examining the potential deliberative qualities of transport-related participation, as the debate about specific solutions and practices may provide a possibility to build consensus, and to formulate and voice potential conflict and dissent. We argue that thus directed analysis, despite its strong emphasis on investigating the potential of transport in terms of exercising self-organisation and relying on grassroots forces, must not exclude state institutions. Rather, the critical analytical framework we are proposing looks into the capacity of transport in terms of reconciling institutional (“top-down”) and non-institutional (“bottom-up”) elements, motivations and processes. In Lefebvre’s own words, herein lies:

“the principal contradiction that autogestion introduces [...]. In essence, *autogestion* calls the State into question as a constraining force erected above society as a whole, capturing and demanding the rationality that is inherent to social relations (to social practice). [At the same time,] *autogestion* tends to reorganize the State as a function of its development, which is to say it tends to engender the State's withering away” (Lefebvre, 2009 [1966]: 147).

In our view, the failure of informal transport practices to incorporate long-term progressive agendas (Cervero and Golub, 2007) confirm the potential of including the state—rather than rejecting it altogether—in the radical shift envisioned by Lefebvre.

Citizen participation has been heavily publicized by the promoters of the newly planned pedestrian zone in Brussels' city centre (see *Figure 2* below). However, it has involved merely conducting a street-level survey with passers-by, holding a handful of public meetings formally open to everyone, and organising a series of working groups bringing together a limited number of (officially) randomly-selected citizens. The deeply un-deliberative and un-interactive character of these participatory moments has been exposed by many of their participants (Frenay and Frenay, 2016; ARAU, 2015). They have further denounced the predominantly informative character of the process, as its primary role was to provide city planners with a platform to communicate their objectives and ambitions to citizens. This was done without much latitude—if any—for the discussion of the various impacts of the project and *a fortiori* for the discussion of alternative proposals. Only secondary issues were left open to deliberation, most of them focusing on the design and aesthetics of the public spaces to be refurbished once the zone closed to motorized traffic. Moreover, contested mobility-related questions were consistently uncoupled from issues of housing development, retail change or the regulation of uses of public spaces in and around the newly-pedestrianized area. Accordingly, the authorities of the City of Brussels appear to have utilized participation as a means of fostering a form of individually-based adhesion to the project, while trying to circumvent and downplay the influence of existing citizen organisations. This strategy, however, has not proven fully efficient, since several existing organisations came together in a new platform—“Platform Pentagone”—to voice their disagreement through press conferences, street demonstrations and petitions, and to engage in legal recourse against the granting of planning permit.<sup>1</sup> Despite being pushed out the window, the genuinely political character of urban mobility issues—and related issues of urban change—has repeatedly crept in through the back door.

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<sup>1</sup> See <http://www.platformpentagone.be>



Figure 2. The marketing campaign surrounding the extension of pedestrian zone in Brussels city centre incorporates participatory slogans. It calls its users to “imagine tomorrow” (top-left) and “make the heart of Brussels beat, together” (bottom-right). Source: Mathieu Van Crielingen.

#### 4.2. Power: Revealing and challenging its existing configurations

Inquiring into the potential of transport in terms of fostering appropriation of urban space through *autogestion* leads to further questions about the extent to which transport may enable inhabitants to reveal and consequently challenge the existing configurations of power. The critical analysis thus assesses the extent to which participatory decision-making processes resist becoming reduced to “small-scale participatory efforts” involving citizens that

are “friendly to innovation,” (Sagaris 2014: 75, 79) and thereby refuse to join the arsenal of de-politicized, consent-manufacturing techniques produced by

“[the] technocratic thought [that] oscillates between the representation of empty space, nearly geometric, occupied only by concepts, by the most rational logics and strategies, and the representation of a permeated space, occupied by the results of those logics and strategies. They fail to perceive that every space is a *product* [that] results from relationships of production that are taken control of by an active group.” (Lefebvre, 2003 [1970]: 154)

Thus conceptualized critical approach to urban transport is not obscured by the blind belief in technological fixes, and declines the invitation to join the continuous search in the dark for brand new technocratic frameworks and solutions to age-old political problems (Geels, 2012). Instead, the RTTC-inspired perspective clearly identifies the full potential of social and political innovations—many of which may be already existing—in terms of tackling various issues related to the uneven socio-spatial relations and power dynamics that continuously shape transport policy and practice. This means analysing transport policies and practices against their potential redistributive character in terms of decision-making, asking whether they are co-created *with* and *by*, and not only *for* passengers and inhabitants. In other words, from the perspective of RTTC, enabling city-dwellers to engage in an inclusive, interactive and deliberative debate about transport is not enough as long as it does not lead up to transferring of significant power over means of production of transport agendas—explicitly highlighted as political—towards city-dwellers. Therefore, the reference to the strategy of *autogestion* opens the fundamental question about the agency of passengers and employees of transport systems and mobility authorities, and the labour conditions of transport workers. Rather than being reduced to the role of customers, digits or zero-hour contractors, in the critical perspective all transport ‘participants’ are approached as political actors, whose potential—or perhaps even right—to act not only as co-discussants, but also as co-managers of transport policies, practices and infrastructures is a valid research topic.

Pedestrianization in Brussels appears to directly adhere to Lefebvre’s call to “limit the rights and powers of the automobile” (Lefebvre, 2003 [1970]: 18) as a profoundly political, “key object” that renders power-rela-

tions drastically uneven, harms social relations and subjects urban space to the dictate of technology for circulation, commodification and consumption (Elden, 2004: 145–146). According to its public promoters, the pedestrianization project in Brussels’s centre is political as it supposedly represents a turning point in terms of redistribution of power over urban planning: away from car-oriented and functionalist planning and towards a “people-oriented” city centre enabling inhabitants and visitors to “re-appropriate” its streets and squares, in the spirit of new urbanist guidelines developed *inter alia* by the Danish architect Jan Gehl, whom local policy-makers and journalists cite as one of their main sources of inspiration (Vermeersch and Hendrickx, 2016). Some supporters of the project even make the point that it would bring a much welcome opening of the urban governance of Brussels, claiming that

“a 20-year long debate about the development of the city centre has been moved on. A city for its inhabitants, visitors and urban flâneurs. For the first time, it is up to the car user to adapt [...] We must understand this change. The order of priorities has been reversed [...] The new pedestrian downtown is an urban development project bearing a large impact on collective imaginary. The governance of Brussels may have really taken a different course.”<sup>2</sup> (Corijn, 2015)

Yet, a closer look at the project suggests that interpreting it as a herald of a new urban planning model that significantly downplays the importance of car mobility in Brussels is an instance of wishful thinking. For the project entails the addition of 1.600 parking spots in three new underground car parks located in immediate proximity to the pedestrian zone to the existing 19.000 underground parking spots in the central city, while pushing away from its territorial limits a number of surface public transport services. In this sense, the extension of the pedestrian zone in Brussels’ centre cements—rather than questions—the local mobility paradigm. The pedestrianization project has barely altered the existing governance frameworks that continue to produce socio-spatially uneven transport policies as a result of which private motorized vehicles continue to occupy urban space to the detriment of public transport, cycling and walking. Except for a new clustering of existing citizen groups in a new platform, no new significant stakeholders have emerged that would for instance lead to an empowerment of public transport users vis-à-vis car owners and road-and- parking construction lobbies.

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<sup>2</sup> Translation from French by the authors.

The political dimension of the pedestrianization project appears to lie elsewhere. Contra repeated claims by its proponents, it may be understood as an attempt to significantly reinforce a long-standing elite-driven urban strategy (De Boeck, Bassens, and Ryckewaert 2017; Van Criekingen 2013) devoted to bring Brussels' central city—now still largely populated by low-income population groups—to its “highest and best use” through the attraction of high rent-yielding functions such as upscale housing, franchise retail and new tourist equipment such as ‘Belgian Beer Palace’ capped with a giant waffle-shaped sculpture.

### **4.3. Beyond the right to mobility: concerning all aspects of urban environment**

Surely, the challenge to existing power-relations determining transport policy must enable an effective transformation of mobility patterns. However, contra the proponents of “sustainable mobility,” research emerging from the RTTC-inspired approach might not be limited to studying and encouraging alterations of individual mobility behaviours or a shift from one mode (e.g. private cars) to another (e.g. public transport or cycling). Instead, genuinely critical investigations into urban transport could reach beyond a mobility-centred perspective to embrace all aspects of urban development. Since Lefebvre applies the term “city” as “a synecdoche for society” (Marcuse, 2009: 244), seen through his lens, critical urban transport is not about transport alone, but also about its impact on a plethora of social, economic, political, built and aesthetic dimensions of space (Purcell, 2014). Besides inquiring about the holistic and multi-scalar potential of transport policies and practices—their (in)capacity to reach beyond administrative boundaries, parochial spaces and interests—this approach further entails highlighting the political-economic underpinnings of the relationship between transport and climate change, the centrality and urgency of the latter Lefebvre perhaps did not fully foresee. Critical transport studies thus openly admits the catastrophic consequences of the finite character of carbon-based energy resources combined with “an open-ended drive for ‘growth’ and ‘development’” (Atkinson, 2008: 81), thereby analysing and conceptualising transport practices as potential seeds for a fundamental change of spatial and socio-economic relations in the post-carbon city.

A RTTC-inspired critical framework thus goes beyond the oft-formulated calls for “the right to mobility”: a simplistic slogan that obfuscates major social and environmental consequences of unlimited and unconditional movement. The postulate of providing equal or “just” access to transport—or its particular forms, modes and practices—appears equally controversial (Martens et al. 2012). For “the right to an accessible city diverts it into the neoliberal order” (Jouffe, 2010: 43), further justifying and reproducing uneven socio-spatial competition among evermore dispersed inhabitants and workers, intensified by the processes of commuting and urban sprawl. After all, providing individuals with better access to mobility is not the ultimate solution to solving systemic undersupply of jobs, affordable housing, educational and leisure facilities.

This leads a RTTC-inspired critical perspective on urban transport to break with portrayals of mobility as a “‘natural’ or [...] ‘god given’” phenomenon (Levy, 2013: 8) or social norm. Instead of centering on the search for more efficient mobility patterns and more environmentally-friendly energy sources that could help to sustain current mobility levels (Geels, 2012), the critical perspective recognizes the need to radically reduce them. This opens the question about the central position of mobility as cornerstone of urban development, and foregrounds the necessity to provide urban inhabitants with the choice (or right) not to live in a perpetual motion (Garnier 2014)—a perspective that resounds in Lefebvre’s call for the right to centrality (Lefebvre, 2003 [1970]) and proximity (Jouffe, 2010).

The Brussels example shows that such a holistic vision is not achieved easily. Throughout the development of the pedestrianization project in Brussels, its public promoters have consistently sought to keep discussions of the many inter-connected dimensions of the project—including mobility, real estate development, retail change, and streetscape design—separated from one other. Notably, parallel planning procedures have been used to give mobility and public space refurbishment their respective legal foundations, while systematically refusing to launch a comprehensive impact studies concerning the multiple facets of the project. Furthermore, the governance of the project has been held firmly in the hands of the sole Brussels’ municipal authorities, although the zone covered by the pedestrianization plan lies at the centre of an urban region exceeding by far the limits of the municipality. This lack of multi-scalar perspective was notably made clear with the at-

tempts of the municipal authorities to impose their views on the regional public transport operator, eventually forcing the latter to accept a reduced public transport service in the city centre.



*Figure 3.* The expansion of the pedestrian zone in Brussels' centre appears to champion a vision of a middle- class city ultimately liberated from any kind of divisions, inequalities, or power struggles, and turned into an attractive shopping and leisure environment for residents and visitors alike. Source: Ville de Bruxelles, "Ensemble faisons battre le cœur de Bruxelles" ("Make the heart of Brussels beat, together"), Press dossier, March 2016.

#### **4.4. An “urgent utopia” on the horizon: reaching beyond existing socio-spatial configurations.**

Put this way, critical urban transport studies are prompted to acquire an inherently transformative character, inspiring a continuous reflection on transport policy and practice that looks beyond existing socio-spatial configurations and institutional frameworks. In this way, the critical perspective examines how transport policies and practices may respond to the need for an “urgent utopia” and “the possible urban”, directly building on Lefebvre’s recognition of urban society as a “virtual object” (Lefebvre, 2003 [1970]: 18). This process employs Lefebvre’s progressive strategy of “transduction, [...] cut[ting] a path that leads beyond the actual world already realized and toward a possible world yet to come” (Purcell, 2013: 21). Seeking such a world encourages the RTTC- inspired analysis to observe the potential of transport policies and practices in terms of advancing towards the “horizon” in a continuous and self-reflective manner, rather than acting as clear-cut, off-the-shelf replicable models. As noted by Brenner (2009) “critical theory is [...] not intended to serve as a formula for any particular course of social change; it is not a strategic map for social change; and it is not a ‘how to’-style guide-book for social movements” (201). The framework proposed above is therefore as much about assessing tangible results, as it is about investigating and delineating a process towards achieving them.

Looking at the visualisations of the future pedestrian zone displayed by the Brussels’ municipal authorities (see *Figure 3* above), one could interpret the project as theoretically championing a vision of a middle-class city ultimately liberated from any kind of divisions, inequalities, or power struggle and turned into an attractive environment offering 24/7 shopping and leisure options to residents and visitors alike. However, the ways in which the newly-expanded pedestrian area has thus far been practiced and appropriated are more complicated: among its users are not only middle-class visitors and tourists, but also residents of nearby inner-city working-class neighbourhoods and the homeless (Marchal 2017). This contradiction might indicate the project might not necessarily realize the initial expectations of its municipal proponents, who had originally conceived as a singular ‘fix’ and ready-made recipe taken from urban managerial cookbooks tested elsewhere, referring to Copenhagen, New York, and Strasbourg as inspiring “best practices.” Instead, the ongoing public debate and fierce contestation by various

social groups has perhaps transformed ‘le piétonnier’ into a more open-ended project, and its horizon is yet to be identified.

## 5. Conclusion

The main purpose of this paper lies in providing a response to the limitations of the sustainable transport approaches in terms of addressing the fundamental political economic underpinnings of transport. In our attempt to re-politicize urban transport theory and practice, and hence to mobilize and strengthen critical urban transport studies, we have found a useful theoretical reference in Henri Lefebvre’s conceptualization of “the right to the city” (RTTC), a concept originally conceived to provide a tool for critically analysing urban practices. We have thus constructed an analytical and explicitly normative framework that by building on RTTC helps to seek and reveal political- economic contradictions that shape transport policies and practices. It is not to be read as a checklist of unambiguous or objective parameters, as none of the concepts offered by Lefebvre—including RTTC and auto-gestion—are meant to function as ready-made models. Rather than allowing to distinguish a pure, global and cross-contextual blueprint of critical transport, they highlight a multi- faceted and complex evolution that is locally situated. Instead of seeking de-politicized “fixes” and “recipes” from elsewhere, it is built around an analysis of how different positions and stakes in situ condition transport policies and practices. This approach may encourage researchers, activists and policy-makers to pose a variety of questions that are seldom on the transport agenda—about the modalities of citizen of participation around transport policies and practices; about the power dynamics underpinning and affected by them; about their relation to broad agendas of urban development, beyond mobility; and about their utopian dimension.

To demonstrate how the analytical framework works in practice, we have briefly looked at the case of the extension of the inner-city pedestrian zone in Brussels as a salient case of an allegedly “sustainable” urban strategy. This empirical vignette exemplifies the fundamental role of political-economic dimensions in shaping contradictions of contemporary transport policies, demonstrating that ostensibly progressive and ‘critical’ intentions in

terms of challenging local mobility and urban planning paradigms do not necessarily translate into participative, transformative and utopian practices. It shows that decisions seemingly limited to the field of transport and mobility—such as banning cars from the inner-city—may often invoke a variety of social, economic and political questions that relating to urban development agendas writ large. Ultimately, the pedestrianization example in Brussels raises the urgency of moving past the limitation of the “sustainable” perspective on mobility and re-embedding transport within urban studies. More specifically, we call for connecting transport research with urban political economy approaches as powerful tools to start unveiling how transport policies are part and parcel of a largely depoliticized redistribution exercise towards (socially) mobile members in society.

The exercise of developing a critical analysis of transport policies is far from complete. Still, this task appears particularly urgent as a variety of transport practices—including radical suppression of car mobility, abolishment of public transport fares or opening of transport policy-making to bottom-up groups—claim to make cities less socio-spatially uneven. As these practices await comprehensive and critical scrutiny, Lefebvre’s work may be a true inspiration in the path towards our better understanding, and ultimately our strengthening various transport innovations.

## Acknowledgments

The authors are grateful to Kobe Boussauw, Frédéric Dobruszkes and Stijn Oosterlynck for many inspiring comments and conversations around earlier versions of this paper. We are also grateful to the three anonymous referees at Urban Geography for their questions and suggestions. None of the above, needless to say, bears any responsibility for the arguments here, which remains our own.

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## CHAPTER 3: MOVING PAST THE SUSTAINABLE PERSPECTIVES ON TRANSPORT

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## **Part Two**

## Chapter 4

**More than just riding without a ticket? Exploring the geography of fare-free public transport.**

# More than just riding without a ticket? Exploring the geography of fare-free public transport

WOJCIECH KĘBŁOWSKI

This chapter has been submitted to *Transportation* and is currently under review.

## Abstract

Although the policy of abolishing fares in public transport—here referred to as “fare-free public transport” (FFPT)—exists in nearly 100 localities worldwide, it appears to be disregarded by a large share of transport scholars, and therefore has not been thoroughly researched. To start filling this gap, this paper builds on a comprehensive review of existing cases of fare abolition and the debate on this policy to provide a definition of FFPT and discuss its different forms. Three perspectives on FFPT are further distinguished—first, approaches that assess fare abolition primarily against its economic impact; second, analyses that look at its contribution to “sustainable” development; third, more critical arguments highlighting its politically transformative and socially just potential. Against the background of this debate, the paper charts and examines the geography of FFPT, identifying regional implemented in diverse geographical contexts. The paper concludes with a discussion of potential pathways for research on FFPT, a policy that while apparently anchored in the field of transport centres of fare abolition as well as patterns behind its implementation. From this analysis emerges an image of FFPT as a policy that exists in diverse forms, supported and contested for a variety of reasons, and, perhaps cannot be understood as transport instrument alone.

## Keywords

fare-free public transport, free public transport, transport policy, sustainable transport, transport geography

## 1. Introduction

“Free public transport does not exist, it is always paid for by somebody” — Yvette Lartigau, transport authority of the French department of Alpes-Maritimes and the Urban community of Nice Côte d’Azur (CERTU 2010).

“Free public transport does not make any sense” — Vincent Kaufmann, École Polytechnique Fédérale de Lausanne, sustainable transport scholar (CERTU 2010).

“The introduction of free public transport [is] a first step towards socio-ecological transformation” (Dellheim, 2016),

“To really respond to the urgency of climate, public transport would have to become free”— Naomi Klein, environmental journalist and activist (Laystary 2015).

The policy of full abolition of fares in public transport (PT)—here referred to as “fare-free public transport” (FFPT)—exists in nearly 100 localities worldwide. As the quotes opening this paper demonstrate, FFPT is highly controversial. Three positions can be identified in the ongoing debate on this policy. First, transport engineers and economists have assessed the rationale, form and outcome of zeroing fares through the lens of utility, efficiency and economic growth (Cordier 2007; Perone 2002; Storchmann 2003; Studenmund and Connor 1982). According to this perspective, FFPT supposedly poses the threat of financially destabilising PT networks, instigating “irrational” travel behaviour and generating “useless mobility” (Duhamel 2004). Furthermore, opponents of ticket-free access to collective transport argued that it negates the essentially liberal perspective according to which PT is as a commodity that must always come at a price (CERTU 2010). Second, scholars who apparently disagree with the predominantly economic perspectives on transport, and instead address mobility problems through the question of “sustainable” development, have highlighted the apparent weakness of FFPT in terms of generating a modal shift from private vehicles to PT (Cats et al. 2017; Cats et al. 2014; Cervero 1990; Fearnley 2013). Third, albeit less prominently, a number of arguments in favour of FFPT have been made outside the academic field of transport and mobility (Brie 2012; Cosse 2010; Dellheim 2016; van Hulten 2006; Robert 2015; Schein 2011), public officials, urban activists and journalists, who often speak from cities where FFPT has

been put to a test (Giovanangelli and Sagot-Duvaurox 2012). Their accounts often provide strong empirical evidence of operational and economic savings related to fare abolition, while highlighting its potentially progressive social and political capacity.

Nonetheless, few studies have attempted to provide a coherent introduction to FFPT (Cats et al. 2017), and detailed analyses of fare abolition have only focused on specific regions or countries (Briche and Huré 2017; Cordier 2007; Volinski 2012). There exists no comprehensive overview of contemporary FFPT policies—apparently disregarded by a large share of transport scholars, and rarely the subject of academic inquiry, FFPT remains insufficiently researched. Aiming to start filling this gap, this contribution charts the geography of FFPT and places it against the background of the debate about the viability and desirability of fare abolition. More specifically, the first objective of the paper is to enhance conceptual clarity by providing a definition of FFPT and discussing its different forms (in section 2). It further distinguishes three perspectives on FFPT—first, approaches that assess it primarily against its economic impact; second, analyses that look focus on its contribution to “sustainable” development; third, arguments highlighting its politically transformative and socially just potential. The debate engaging with these three outlooks on FFPT offers a variety of arguments pro and contra fare abolition, and serves as an analytical lens through which the geographical distribution of FFPT is examined (in section 4). All cases of complete abolition of fares are mapped, and the geography of rationales behind FFPT is discussed, in an attempt to start unravelling the reasons why fares have been zeroed in strikingly diverse localities. The final section 5 reviews a number of conclusions that can be drawn from this mapping exercise, and sets the agenda for further research on fare abolition.

## 2. Conceptualising and defining different forms of FFPT

The preparation of a comprehensive overview of the policy of FFPT began with an analysis of the literature on fare abolition. To this end, a search for English-speaking literature was conducted in Google Scholar, Scopus and Web of Science using ‘free transit,’ ‘free public transport\*,’ ‘zero-fare public transport\*’ and ‘fare-free public transport\*’ as keywords. The ‘transport\*’ string was applied to capture both ‘transport’ and ‘transportation,’ and thus to embrace European as well as North American contributions. To detect French-speaking literature, a combination of keywords ‘gratuité’ and ‘transport’ was additionally searched in cairn.info and Google Scholar. Compiling a near-complete list of cases of fare abolition further involved studying a variety of websites and blogs discussing various FFPT cases, and compiling their lists. They have included sites that attempt to depict the worldwide landscape of FFPT<sup>1</sup> as well as those focus on particular global regions: Europe<sup>2</sup>, Africa<sup>3</sup>, post-Soviet Europe and Asia<sup>4</sup>, and Australia<sup>5</sup>. Finally, country-specific sites have been analysed, looking at FFPT from the perspective of countries such as Brazil<sup>6</sup>, China<sup>7</sup>, India<sup>8</sup>, New Zealand<sup>9</sup>, Philippines<sup>10</sup>, Poland<sup>11</sup> and Taiwan<sup>12</sup>. Needless to say, these internet sources were not taken verbatim; rather, they were approaches as entry points for identifying existing fare abolition programmes. Each case reported by these outlets was then

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<sup>1</sup> Key sources have included <https://farefreepublictransport.com>, <https://www.facebook.com/freepublictransport>, <http://freepublictransit.org>, <http://fptlib.blogspot.com>, <http://frepubtra.blogspot.com>, and [www.tarifazero.org](http://www.tarifazero.org).

<sup>2</sup> <http://farefreeeu.blogspot.com>

<sup>3</sup> <http://farefreeafrica.blogspot.com>

<sup>4</sup> <http://transport-vsem.livejournal.com>

<sup>5</sup> <http://farefreeaustralia.blogspot.com>

<sup>6</sup> [www.farefreebrazil.blogspot.com](http://www.farefreebrazil.blogspot.com)

<sup>7</sup> <http://farefreechina.blogspot.com>

<sup>8</sup> <http://farefreeindia.blogspot.com>

<sup>9</sup> <http://farefreenz.blogspot.com>

<sup>10</sup> <http://farefreephilippines.blogspot.com>

<sup>11</sup> [www.facebook.com/bezplatnakomunikacjamiejskawpolsce](http://www.facebook.com/bezplatnakomunikacjamiejskawpolsce)

<sup>12</sup> <http://farefreetaiwan.blogspot.com>

verified by a study of municipal websites and documents, as well as those of local PT companies and local media. The review embraced sources dating until January 2017: a timeframe that is reflected below in the listings of FFPT cases.

What emerges from thus conducted review is that the idea of “free” public transport is not uniform: it takes up a variety of forms, and exists in highly diverse locations. Before exploring their landscape, several conceptual issues need to be clarified. First, it is important to address an oft-made critique according to which the terms “free public transport” and “free transit” inaccurately suggest that as riding on board of public transport is “free,” nobody pays for it. Accordingly, throughout the paper I refer to the notion of “fare-free” networks—it highlights the absence of tickets as the principal and unique characteristic of the policy, and accentuates that fares are “free” only because they are fully subsidised, and thus fully paid for. A further clarification has to be made with regard to the ownership structure of fare-free transport. There exists a plethora of fare-free collective transport services that are explicitly *private*—their instances include fare-free services offered by shopping centres interested in linking up with customers, large companies providing a commuting service to their employees, hotel shuttles, or car-pool initiatives operating at different degrees of formality, and often organised via online platforms. Instead, the focus of this paper is explicitly on fare-free *public* transport (FFPT), understood as a particular form of public subsidy provided by (local) governments and institutions.

However, as I further explain below, not all instances of FFPT are equal, depending on when and for how long fares are suspended, where the fare-free regime occurs, and who obtains access to free rides. In other words, while some cases of FFPT can be identified as “full,” others are “partial” as they incorporate important temporal, spatial and social limitations (as shown in *Table 1* below). “Full” FFPT can be defined as a ticket-free system implemented on the vast majority of routes and services provided within a given urban PT network, available to the vast majority of its users, most of the time, and for a period of at least 12 months. “Partial” FFPT, on the one hand, appears to exist under four main forms: (a) “temporary,” (b) “temporally-limited,” (c) “spatially-limited,” or (d) “socially-limited”.

CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

Form of FFPT	Key features	Examples
Full FFPT	A ticket-free system implemented on the vast majority of routes and services provided within a given urban PT network, available to the vast majority of its users, most of the time, and for a period of at least 12 months.	<ul style="list-style-type: none"> <li>• Aubagne (France). The access to the entire local bus and tram network is unconditionally free of charge to all users, at all times.</li> <li>• Tallinn (Estonia). Free rides are available on all services (buses, tramways and trolleybuses), at all times, but only to official city residents. Visitors and commuters to the city continue to pay fares. As many as many as 95% of all trips are made free of charge.</li> </ul> <p>See <i>Tables 3 and 4</i> in Appendix below for complete list of existing and discontinued full FFPT cases.</p>
Partial FFPT  (a) temporary	A ticket-free system that is limited in one or more of the ways described below:  Fares are abolished for a short period of time, defined here as less than 12 months.	<ul style="list-style-type: none"> <li>• fares originally suspended for a longer period of time, then restored after initial fare-free tests:                             <ul style="list-style-type: none"> <li>- Asheville (North Carolina, United States) in August-November 2006;</li> <li>- Cape Breton (Nova Scotia, Canada) in July-August 2016;</li> <li>- Guangzhou (China, Guangdong) in November 2010;</li> <li>- Salt Lake City (Utah, United States) in October 1979;</li> <li>- Stavanger (Norway) in August-December 2011;</li> <li>- Topeka (Kansas, United States) in May 1988.</li> </ul> </li> <li>• fares intentionally suspended for a short period of time due to:                             <ul style="list-style-type: none"> <li>- high air pollution levels: Paris (France) in 2013 2015 and 2016; Kraków and Warsaw (both Poland) in 2016; Skopje (FYROM) in 2017;</li> <li>- natural disaster: flooding in Prague (Czech Republic) in 2002;</li> <li>- terrorist attack: Paris (2015);</li> <li>- financial and political crisis: Athens (Greece) in 2015;</li> <li>- “car-free day”: celebrated every year on 22nd of September (a variety of localities worldwide).</li> </ul> </li> </ul>

## CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

(b) temporally-limited	Fares do not apply in specific yet regularly occurring periods of time	<ul style="list-style-type: none"> <li>• before the morning peak (before 7am in Chengdu, Sichuan, China; before 7.45am in Singapore). After this time, tickets must be validated;</li> <li>• on every first day of the month (Jelenia Góra, Poland);</li> <li>• on weekends (Gorlice, Poland).</li> </ul>
(c) spatially-limited	Fares do not apply to a specific area or mode of transport, or the FFPT service is limited to 1 or 2 routes	<ul style="list-style-type: none"> <li>• specific zone: Melbourne (Australia);</li> <li>• specific service within a larger “paid” public transport network: Boston (MA, United States), Columbus (OH, United States) and Kuala Lumpur (Malaysia);</li> <li>• specific mode: urban ferries in Amsterdam (The Netherlands) and short-distance “neighbourhood” buses in Chengdu (China, Sichuan);</li> <li>• a small-scale service (1 or 2 routes), e.g. Læsø (Denmark), Treasure Valley (ID, United States), Stanford (CA, United States), Zielonka (Poland).</li> </ul>
(d) socially-limited	Fares do not apply to a specific group of users	<ul style="list-style-type: none"> <li>• children (Tarnów, Poland);</li> <li>• youth and students (Kluczbork county, Kołobrzeg, Lublin; all Poland);</li> <li>• the elderly (Cape May County, NJ, United States);</li> <li>• pensioners (Shanghai, China);</li> <li>• low-income groups (Timișoara, Romania), the unemployed (Gdańsk, Kraśnik, Radom, Rzeszów, and Tarnów; all Poland);</li> <li>• the disabled (Lublin, Poland; Xiamen, China, Fujian) and their guardians and caretakers (Tarnów, Poland);</li> <li>• visitors and tourists (Geneva canton, Switzerland);</li> <li>• car owners (occasionally in Kraków, Warsaw; both Poland).</li> </ul>

*Table 1.* Typology of different forms of FFPT.

Temporary FFPT takes place when fares are abolished for a short period of time, defined here as less than 12 months. This may happen when after a limited trial period, FFPT is assessed not to have produced the anticipated results, and consequently is abandoned. FFPT may also be explicitly conceived as an exceptional and isolated event, put into practice for a limited time only, for instance to respond to high air pollution levels, natural disasters, terrorist attacks, or financial and political crises. It may also form part of the “car-free day”—which in some cities lasts up to a week—celebrated every year on 22nd of September in a variety of municipalities worldwide.

Temporally-limited FFPT occurs when fares are not charged in specific yet regularly occurring periods of time. For instance, in Chengdu (China, Sichuan) fares do not apply in the bus network before 7am, while in Singapore collective transport is free to use before 7.45am. After this time, tickets must be validated.

Spatially-limited FFPT applies to a specific section of the PT network, a specific mode of transport, or to PT services that are in fact composed of only one or two routes, and therefore could hardly be considered as a network. In Melbourne (Australia), free travel is available within a strictly-delimited “free tram zone,” while in Boston (MA, United States) it is limited to a single service within a larger PT network. Examples of specific ticket-free modes include urban ferries in Amsterdam (The Netherlands) and short-distance “neighbourhood” buses in Chengdu (China, Sichuan). In a plethora of smaller towns as well as in several nature parks and university campuses in the United States, PT systems are entirely fare-free, yet in fact consist of merely one or two lines—given their scale, such small networks are in this study considered to be spatially-limited.

Socially-limited FFPT embraces a specific group of users, usually children, youth and students, or the elderly. In this form FFPT may well exceed the urban scale and be applied on the national level—in Slovakia the railway network in offers zero-fare tickets to children, students, retired persons and seniors. FFPT may further be approached as a form of social benefit to low-income groups, the unemployed, the disabled and their guardians and caretakers, or a free service for visitors and tourists, or even car owners.

Finally, different partial forms of FFPT can be combined within the same transport system. For instance, in Płock (Poland) FFPT is spatially-limited to a single line, the free use of which is further temporally-limited to weekends only. In Ghent and Leuven (Belgium) fares are not charged small in a small part of the local PT network (night buses), and only in specific periods of time (weekends).

The remainder of this paper focuses on the full FFPT programmes, as a particularly striking and radical form of fare abolition.

### **3. Why (not) abolish fares? Three perspectives on the viability and desirability of FFPT.**

The diversity of forms assumed by FFPT and the continuous growth of the number of cities and towns implementing this policy (discussed in more detail in section 4 below) have not led to a particularly fervent debate about it. Nonetheless, when reviewing arguments in favour or against abolishing fares, and in particular with regard to the full form of fare abolition—made by engineers, academics, officials and activists—three main approaches to FFPT can be distinguished. Borrowing a typology of different perspectives on urban transport conceptualised by Kębłowski & Bassens (2017), they are summarised as viewing ticket-free programmes from the perspective of—respectively—economic rationality, sustainable development and social justice combined with political transformation.

#### **3.1. FFPT: economical?**

Most of transport academics and practitioners speaking about FFPT seem to view it through the lens of utility, efficiency and economic growth. The idea of abolishing fares is thus criticised for making negative impact on the financial stability of PT networks, as it reduces fare-box revenue while increasing costs of maintaining security and responding to higher passenger

demand (Storchmann 2003). As explained by the head of PT company in Montpellier (France), many PT operators consider zeroing fares as a policy that “deprives public transport from resources essential for its development” (CERTU 2010). Therefore, transport engineers tend to consider FFPT as an option viable only for cities where prior to implementation of FFPT both the share of ticketing revenue and passenger volumes are low (Duhamel 2004). PT authorities in large urban areas further estimate FFPT to function only as a small-scale policy. Reducing fare prices is deemed appropriate only in small PT networks in which the demand for PT may be rather low, rather than in larger ones (in cities), in which fare systems are much more diversified, and the market for public transport is much larger (Perone 2002).

In response to these critiques, a number of economic analyses provided by pro-FFPT NGOs and think-tanks point out that abolishing ticketing systems can lead to a significant decrease of equipment and personnel costs (Brie 2012; van Hulten 2006). Savings can be made by ridding of ticket validating and vending machines, ticket control devices such as barriers and gates, as well as secure cash management system that includes counting rooms, cameras, cash pick up and deposit services. FFPT also means cutting commission costs related to third-party ticket sales, production of paper or electronic tickets, and accounting services. Removing ticket barriers may also involve opening up space that can be used in an economically more viable way. Brie (2012) further argues that in many PT networks—regardless of their size or level of complexity—the revenue from ticketing constitutes only a small part of total PT budget, and therefore the actual costs of maintenance and investment in a PT system are never fully covered by PT passengers.

Several economic studies further criticise FFPT as “false good idea” that allegedly contradicts the transport market. Whereas FFPT offers a misleading “illusion” (UTP 2011), the hard “economic reality” (FNAUT 2015) requires that PT follows the tenets of urban entrepreneurialism. This means that it should function as a self-funding or for-profit agency subjected to market mechanisms, rather than a publicly subsidised system, or a welfare programme in which public transport acts as an element of a social policy. Fare-free PT is further understood to have no value to its providers and users alike, creating “an illusion that there are goods or services that have no cost.” (CERTU 2010). In other words, one of the main reasons why transport authorities do not want reducing fares to zero is because they see FFPT as

eradicating fundamental financial incentive for PT operators (Duhamel 2004), and leading to symbolic devaluation of transport service in the eyes of its passengers-clients. In turn, the weakening of the relationship between the network and its users supposedly increases the amount of ‘problem riders’ and resultant vandalism (Cordier 2007; Volinski 2012).

Adding to the critiques made by economists, transport engineers further portray FFPT as an irrational idea. Since fares are meant to function as a demand management mechanism that prevents short or marginal trips and controls passenger behaviour, abolishing them supposedly leads to irrational and irregular use of PT network, and results in more “non-productive trips” (Cats et al. 2014) that do not derive from actual mobility needs. Referring to the Simpson-Curtin rule that describes price elasticity (the relationship between PT fare price and ridership), Volinski (2012, 2) explains that a 10% fare reduction can be expected to produce a 3% increase of ridership. Reducing fares to zero should therefore lead to 30% increase of passenger volumes, and “is virtually certain to result in significant ridership increases no matter where it is implemented”. For PT operators, however, this means facing the problem of “useless mobility” (Duhamel 2004) and the resultant network overcrowding, as well as decreased reliability and punctuality. Nonetheless, lack of on-board ticket control—particularly in the case of front-door ticket validation—has also been demonstrated to result shorter dwell time, faster boarding and consequently higher commercial speeds (Volinski 2012).

### **3.2. FFPT: sustainable?**

Another set of arguments regarding FFPT revolves around its potential capacity in terms of contributing to the “sustainable” transport paradigm (Banister 2008). On the one hand, research conducted in Denmark (Thøgersen & Møller, 2008), Estonia (Cats et al., 2017) and Germany (Baum, 1973) shows that an increase of PT usage among car drivers correlates less strongly with a reduction or abolition of PT tickets than with increase of gas prices (Chen et al. 2011; Haire and Machemehl 1992; Litman 2004), restriction of parking and road usage, or increase of PT quality in terms of its speed, frequency and coverage (Cervero 1990). Moreover, as indicated by research on FFPT projects in Hasselt (van Goeverden et al. 2006) and Templin

(Storchmann 2003), new passengers appealed by zeroed PT fares are first and foremost pedestrians and cyclists, not car drivers. This finding informs an argument that—from the perspective of sustainable transport—reducing fares is an “unsuitable instrument for reducing car use and its external costs” (Fearnley 2013). Therefore, many PT operators associate reducing of the price of PT with a decreasing its quality, and it is with the former that they appear to be more concerned (FNAUT 2015; UTP 2011).

However, although generating a modal shift from the car to PT does not appear to be the main objective behind abolishing fares, and the achievements of FFPT in this regard are rather limited (Volinski, 2012), ticket-free systems have nonetheless been demonstrated to achieve good results in terms of attracting car users to PT. Brown and his colleagues (2003) report that providing students of free access to PT to students of University of California reduced increased the bus ridership among commuters to its campus by 56% and reduced solo car ridership by 20%, suggesting that the policy “can succeed almost anywhere” (69). Consequently, FFPT can be regarded as a policy that helps to reduce car traffic externalities such as air pollution and noise—which is admitted even by critics of FFPT (Cats et al., 2017; Fearnley, 2013)—although contributing to this reduction is not its primary aim. In Tallinn, for instance, where the largest contemporary full fare abolition programme is located, as a result of suspending fares the modal share of PT increased by 8% and that of cars decreased by 3%. Since even a modest decrease in car usage means decrease of pollution, several prominent climate activists such as Naomi Klein—as one of the quotes of opening this paper demonstrates—are to be found among FFPT proponents. Furthermore, environmental arguments in favour of FFPT often go hand in hand with visions of free transport as contributing to life quality and helping to “revitalise” urban areas, for instance in cities experiencing post-industrial decline (Briche and Huré 2017).

### **3.3. FFPT: socially just and politically transformative?**

Rather than assess its economic viability or contribution to urban sustainability, the third set of perspectives on FFPT intends to evaluate its potential to facilitate a profound and long-term social and political transformation. According to this approach, the fundamental value of fare abolition lies

in introducing a “simplified use of [PT]: anyone can take [it] any time they want” (Cordier 2007). Abolishing fares is praised for directly addressing the issue of social exclusion, inequality, and transport poverty by increasing accessibility to PT of lower-income inhabitants (Larrabure, 2016; Schein, 2011). FFPT is thus viewed as capable to contribute to a more socially just transport system that “shows solidarity with the weak, with those who cannot afford a car, with those who are dependent on public transport, who are particularly affected by its drawbacks” (Brie 2012, 8-9). However, it is questioned to what extent fares constitute a barrier to mobility and whether removing them does not lead to discrimination against citizens who do not use PT, or even injustice related to providing high-income citizens with a free-of-charge service (Philipson and Willis 1990), even though they theoretically pay higher income taxes. Nonetheless, this argument should be juxtaposed with data about modal profiles of different classes, as in many urban contexts the rich tend to use the car much more than PT, while the poor are dependent on collective transport.

In opposition to warnings about the substantial increase of ridership caused by reducing fares, this perspective raises a fundamental question whether a surge of PT passengers could be considered as a negative phenomenon. According to this logic, as PT passengers do not drive in private vehicles, and hence do not contribute to traffic congestion, they render a service to car users, and therefore their individual cost for accessing PT should be reduced. PT is thus conceptualised not as a commodity but a “common good” to be financed by the community as a whole—similar to many other public services such as healthcare, parks, roads, sidewalks, cycling paths, streetlights and lampposts, libraries, schools, kindergartens, playgrounds (Giovanangelli and Sagot-Duvaurox 2012; Robert 2015).

In this sense, FFPT is understood to introduce a different logic behind transport. As it moves away from the market-oriented focus on profitability and demand management, it is identified to directly challenge a liberal dogma that “continues to envisage payment as a way of assuring that infrastructure is respected in the case of public transport” (Cosse 2010, 42). For some municipal officials, it fits the socialist vision of transport as publically-run, accessible and affordable service. For others, it expresses a more radical, “anti-capitalist principle—an outright de-commodification of public goods and services” (Schein 2011, 118), and a transition from “client” to “citizen.”

Abolishing fares may also be understood as an act of opposition to biopolitical control that is exercised over PT passengers through ticket personalisation and control through barriers and identification systems. However, FFPT “would not solve all of our problems; rather, at best it would represent the first step” (Dellheim 2016, 1) towards a wider transformation of power relations that shape transport policy and practice. In opposition the observation made by several scholars according to whom such transformation is rarely demanded by passengers—more preoccupied with issues of PT safety, frequency, reliability, and availability (Cervero 1990; Yaden 1998)—a plethora of organisations and movements have campaigned for fare abolition (Dellheim 2016). One of their many examples is Movimento Passe Livre (“free fare movement”) that emerged during protests against an increase of PT fares in Brazil in June 2013 (Larrabure 2016). The movement referred to the question of increased cost of using collective transport not only to highlight and contest stark inequalities between the highly-mobile car-driving urbanites and PT-bound urban poor, but also to voice criticism against the continuing commodification of transport. Its demand for FFPT therefore constituted a radical attempt to create an alternative to capitalism, and to lead “the struggle for the new commons” (Larrabure 2016, 9)—away from purely economic or “sustainable” considerations.

Year	Full FFPT cases					
	Total	Europe	North America	South America	Australia	Asia
1970	<b>1</b>	-	1	-	-	-
1980	<b>6</b>	2	4	-	-	-
1990	<b>12</b>	4	8	-	-	-
2000	<b>25</b>	7	16	2	-	-
2010	<b>56</b>	27	24	5	-	1
2017	<b>96</b>	56	26	11	1	2

Table 2. The evolution of full FFPT cases worldwide (1970-2017).

CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

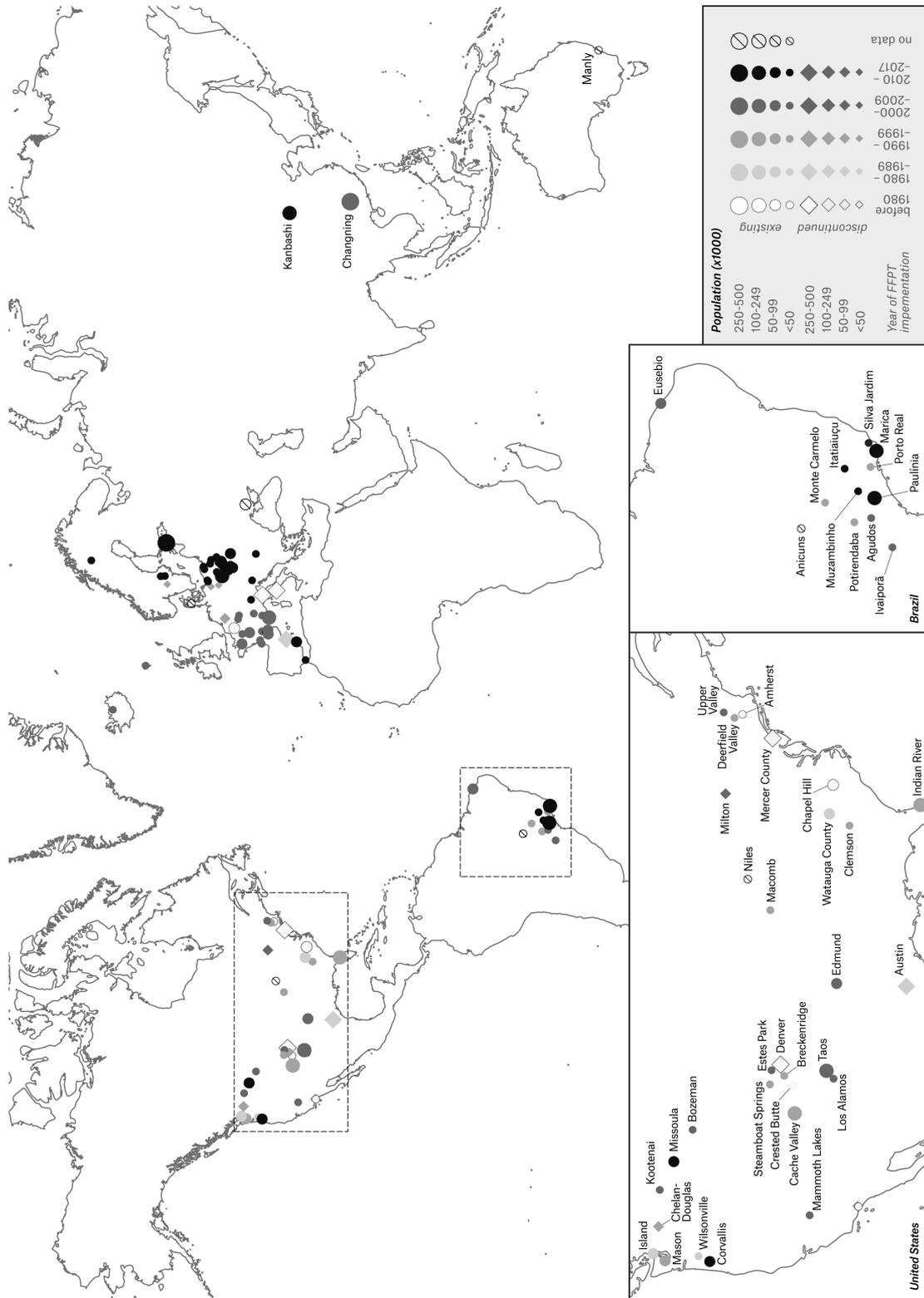


Figure 1. Geography of full FFPT programmes (world).



## 4. Geography of full FFPT

Thus systematised arguments for and against FFPT can serve as a lens for viewing the contemporary landscape of full FFPT. The review discussed in Section 2 has identified as many as 96 of its cases worldwide, of which 56 are located in Europe, 27 in North America, 11 in South America, 2 in Asia, and 1 in Australia and Oceania. *Table 2* (see above) briefly shows the historical trajectory of FFPT, while *Figures 1* and *2* (see above) present its contemporary geography, mapping all confirmed existing or discontinued cases of full FFPT.<sup>13</sup> Additionally, *Tables 3* and *4* (in Appendix) list all existing and discontinued cases of full FFPT

While full fare abolition may seem like a coherent and simple idea of abolishing fares, the rationale behind it appears to follow certain regional patterns, with variegating emphasis on specific economic, sustainable and socio-political arguments for FFPT. This means not only that the reasons for fare abolition may differ from region to region, but also that FFPT is implemented not only in localities with established socialist traditions (as in Europe or Brazil), but also in places where an essentially liberal ideology predominates (as in the US).

### 4.1. United States

The United States is where the first reported case of full fare-free public transport (FFPT) system occurred—in 1962 in the town of Commerce in the suburbs of Los Angeles—and where throughout 1970s, 1980s and 1990s most of full FFPT programmes could be found. At that time, the proponents of fare abolition in North America referred to social and political arguments, pointing out anticipated social benefits of abolishing fares, and—signalling what in future would materialize as a call for “sustainable” mobility—claimed that zeroing fares could help to increase the use of PT and offset the high invest-

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<sup>13</sup> While this review builds on variety of sources, as discussed at the beginning of Section 2, it is nonetheless possible that there exist cases of full FFPT that have not been detected by the author. The review should therefore be considered as a first step towards a fully comprehensive, long-term exercise of mapping of all cases of fare abolition.

ment in automobile infrastructure (Aleshire 1971; Greenspan 1976; Scheiner 1976; Scheiner and Starling 1974). The opponents of FFPT cited economic theories, demonstrating that a reduction of ticket prices to zero would not significantly alter passenger behaviours (Domencich and Kraft 1970). The largest FFPT projects from that time have been discontinued. Abolished in 1978 in Mercer County (New Jersey) and Denver (Colorado), a year later fares were re-installed due to the lack of political support, despite a significant increase of passenger volumes (+49% and +30% respectively). Similarly, full FFPT programme introduced in Austin in October 1989 was cancelled only 14 months later: while it helped promote PT and increased its ridership by up to 75%, it also led to vandalism and complaints from transport personnel (Volinski 2012).

Three decades later, contemporary fare-free programmes in the US do not seem to derive from socio-political motivations. The rationale behind fare abolition corresponds to the predominantly liberal views on the role of public institutions in the US, and in most cases FFPT is justified as an economic measure. As identified by Volinski (2012), FFPT exists in three types of localities in the US: small urban/rural areas (e.g. Edmund, Oklahoma; Kootenai County, Idaho), university campuses (e.g. Chapel Hill, North Carolina; Macomb, Illinois) and natural parks and tourist resorts (e.g. Crested Butte and Estes Park, both Colorado). For small urban/rural areas, the increase in PT ridership resultant from withdrawing tickets translates into higher state subsidies (calculated per passenger) and lower costs per passenger. For university campuses, it means reducing parking saturation or decrease of investment in on-campus car infrastructure. It also entails faster boarding speeds—a motivation shared by transport agencies in tourist resorts, where FFPT constitutes a strategy for boosting place attractiveness and competitiveness. Some social and political concerns can be identified only in small urban/rural areas, where FFPT is often introduced to address economic recession, help the unemployed and working poor.

## 4.2. Europe

Parallel to the diffusion of FFPT across the US, several important cases of FFPT emerged in Europe between the 1970s and 1990s. Unlike in the US, however, fare abolition in Europe at that time was often associated with its

anticipated contribution to a transition towards more sustainable mobility patterns. Additionally, in many municipalities with established left-wing traditions (socialist, post-socialist or communist), the idea of providing unconditional access to PT was strongly related to socio-political rationales. The first European experiment with abolishing PT fares began in 1971 in Colomiers, in the suburbs of Toulouse (France). The French town was soon followed by Rome where, as *The New York Times* reported at the time, the left-wing municipality combined economic and socio-political motivations behind FFPT. Fares were zeroed “to ease the chronic congestion” (Hofmann 1971) on the one hand, and to provide the working class with better access to collective transport on the other hand. It was also due to economic reasons that after seven months the fares were restored. Similar reasons guided the communist mayor of Bologna, who introduced FFPT in 1973 as a free service for local workers and students. Fare abolition also formed part of a radical strategy of improving quality of urban environment by prioritising PT over private vehicles. The much discussed municipal manifesto titled “Bologna shall not suffocate” (Comune di Bologna 1972) could be identified as one of early examples of an urban policy advocating sustainable mobility. Meanwhile, the pros and cons of FFPT were debated in the Netherlands (van Hulten 1972) as well as in Western Germany (Baum 1973), where protests were held to highlight the social impact of PT fare increases in Bremen, Hanover, Heidelberg, and Saarbrücken, while FFPT was briefly proposed by socialist governments in Munich and Frankfurt. Arguments explicitly referring to the question of sustainable mobility underpinned the decision to launch one of the most famous FFPT programmes to date. Faced with the problem of high traffic congestion, the mayor of Hasselt (Belgium) declared in 1996 that “we don’t need new roads, we need new ideas” (Doumayrou 2012). Hasselt dropped the plans for constructing a new ring road and instead eliminated PT fares and reformed the network of collective transport, giving it clear priority vis-à-vis private vehicles. As a result, by 2001 PT ridership increased 12 times, its network has grown from 2 routes to 11, and its fleet has expanded from 8 to 46 vehicles (Volinski 2012). However, from the perspective of sustainable transport, it has been pointed out that although as much as 37% of the newly-generated trips were done by new PT users, half of them were generated by former pedestrians and cyclists (Cats et al. 2017). Increase in operational costs and change of the local political majority have led to the cancellation of Hasselt’s fare-free policy in 2014. Lack of continuous political support was be-

hind fare restoration in a number of European cases from that time, including Castellón (Spain) and Colomiers (France).

Ever since the 2000s, a plethora of full FFPT systems have emerged in Europe, and in this continent where most (56) of the world's FFPT cases are found. A particularly large number of them is located in Poland (21, all of which have emerged after 2010) and France (20). Contemporary FFPT programmes continue to be more firmly underpinned by “sustainable” arguments than their American counterparts. Many European municipalities justify FFPT as a strategy working towards reducing car usage (e.g. Avesta, Sweden; Bełchatów, Goleniów and Gorlice, all Poland) and car-related pollution and noise (e.g. Tórshavn, Faroe Islands; Kristinehamn, Sweden; Livigno, Italy) and thereby increasing the liveability and quality of urban environment. Socio-political arguments prevail in many municipalities that build on their socialist background. Several localities in France (e.g. Colomiers, Vitré) openly declare that the decision to abolish fares was not inspired by attempts to reduce car usage and generate a modal shift towards PT. Instead, as opposed to situation in the US, FFPT is often explicitly conceived as a social policy aiming at helping disadvantaged groups (as in Colomiers, Compiègne and Figeac), and introduced unconditional use of collective transport re-defined as common good (Aubagne). Similar arguments have been evoked in Avesta (Sweden), Nova Gorica, Velenje (both Slovenia) and Tallinn (Estonia). In Poland, FFPT is an element of municipal social policy (in Lubin) that aims at providing a transport service that is more accessible (Środa Wielkopolska) or common (Mława). In Żory (as in Aubagne, France), one of the objectives behind FFPT is to improve the working conditions of PT drivers.

Fewer European municipalities justify their decision to abolish fares by referring to economic reasons such as generation operational savings (e.g. Hallstahammar and Ockelbo, Sweden) and increase of the efficiency in under-used small-scale PT networks (e.g. Chateaudun and Gap in France; Kościerzyna and Żory in Poland). In this perspective, FFPT has also been legitimised as an instrument for improving job accessibility (Goleniów, Poland) and acting as an element of territorial competition, vis-à-vis either the urban core (Ząbki, Poland) or the suburbs (Tallinn, Estonia).

### **4.3. Brazil**

Among the most recent additions to the landscape of FFPT are ticket-free programmes in Brazil. Several Brazilian FFPT cases are characterised by a strong emphasis on the political and social dimension of fare abolition, considered as a social policy helping to tackle inequality (in Itatiaiuçu), providing common access to transport across the local population (Agudos, Ivaiporã) and thus integrating the urban territory (Itatiaiuçu, Ivaiporã). FFPT was also used as a symbolic step signalling a thorough makeover of the PT network along the lines of sustainable development. Fare abolition was conceived as accompanying a radical improvement of network quality by both left-wing and centre-right municipalities (Agudos and Silva Jardim respectively). Additionally, both socialist (Ivaiporã) and liberal (Silva Jardim) governments have legitimised FFPT as an economic strategy of increasing the use of otherwise empty PT vehicles.

#### **4.4. China**

A somewhat different mix of arguments has supported full abolition of fares in two Chinese cities: Changning (Hunan) and Kangbashi (Inner Mongolia). While officially FFPT has been developed as a socio-political strategy towards improving public welfare, it appears more centred on the objective of tackling rapidly increasing car congestion. In Kangbashi, FFPT is expected to tackle an additional problem of underpopulation in an area that was built in anticipation of population growth, yet failed to attract many residents.

### **5. Conclusions**

This article opened with the observation that albeit the policy of fare-free public transport (FFPT) abolition is controversial, it remains under-researched. To start filling this gap, different forms of FFPT were defined and discussed. Three main sets of approaches to the question of fare abolition in cities were then identified—they view FFPT against its impact on economic stability of PT networks, its capacity to facilitate sustainable development, or its potential to contribute to a social and political transformation. These per-

spectives provide numerous arguments for and against FFPT, which were subsequently used to study the geography of discontinued and existing cases of FFPT, and to begin unveiling different rationales behind fare abolition across this geography.

A number of conclusions can be drawn from this study. First, several regional centres of FFPT can be distinguished: Europe, the US and Brazil. From 1970s to 1990s most ticket-free programmes were located in the US, and only several in Europe. Many of these early instances of FFPT are discontinued today, and the highest concentration of fare-free towns is located on the European continent, with a particularly high number of cases in France and Poland. Since 2000s several instances of FFPT have also emerged in Brazil, China and Australia.

Second, although FFPT might appear to be a simple and uniform idea, important variegations can be observed as to why it is implemented. On the one hand, FFPT follows certain regional patterns, as socio-political and sustainable arguments in favour of fare abolition are particularly present in Europe and Brazil, while being less visible in the US, where economic rationales behind FFPT are more prevalent. On the other hand, the way that particular municipalities justify FFPT seems to be loosely related to their political orientation. Whether FFPT is put into place as a project aiming at generating economic savings, promoting sustainable mobility or providing unconditional access to mobility for all, does not appear to entirely depend on whether the local administration is predominantly socialist, green, centrist or liberal. In other words, there seems to be no direct or strong correspondence between the type of rationale behind FFPT and the political “colour” of the municipal government implementing the policy. This further means that FFPT cannot be labelled as a left-wing or right-wing policy. While the change of municipal political majority—from right-wing to left-wing or vice versa—could lead to re-installing fares (e.g. in Hasselt, Belgium; Castellón, Spain), in many cities FFPT has proven resistant to changing governments (e.g. in Agudos, Brazil; Torrevieja, Spain).

Third, the geography of FFPT partially confirms that full abolition of fares that has been tested and applied primarily in small urban areas. FFPT has emerged in second- or third-tier towns and cities with less than 100,000 inhabitants (see Tables 3 and 4 in the Appendix below). However, the case of

Tallinn (Estonia)—the largest one to date—seems to be an important exception to this rule, exemplifying how fare abolition works in a mid-sized urban area, a national capital, and a first-tier city. Further evidence about how FFPT can be tested in mid-sized cities is provided by FFPT programmes in Changning (China, Hunan) and—now discontinued—in Austin (Texas), Bologna (Italy) and Denver (United States, CO). With regard to large urban areas (above 500,000 inhabitants), FFPT practices have been either temporally-limited (e.g. in Singapore; Chengdu, China, Sichuan) or spatially-limited, with fares abolished on specific routes or in special zones (e.g. in Sydney, Australia; Baltimore, United States, MD; Manchester, United Kingdom).

Fourth, the geography of FFPT embraces towns and cities that seldom appear on maps drawn by urban and transport geographers, and are largely absent from urban debates. While this may suggest that FFPT remains an exceptional and marginal policy—the majority of PT networks worldwide continue to charge fares—the rising number of FFPT cases indicates that it is an established practice.

FFPT thus emerges as a policy that exists under diverse forms, supported and contested for a variety of reasons, and implemented in diverse geographical contexts—a policy that requires detailed investigation, rather than scientific disdain. Yet, as “only a handful of full-fledged FFPT were implemented and evaluated” (Cats et al., 2017), this diversity has not yet been sufficiently studied. The existing studies on FFPT are centred predominantly on transport-related issues, assessing fare abolition solely against its economic and technical dimension, or its potential contribution to sustainable mobility. These approaches may indeed highlight a number of salient points, showing that FFPT runs the risk of inducing “irrational” travel behaviour that cannot be predicted by modelling instruments, discussing potential costs related to satisfying increased PT demand, and how they compare with savings generated by abandoning ticketing systems. The transport perspective FFPT may also study the extent to which free rides are attractive to car drivers and can therefore alter modal splits and traffic patterns.

However, viewing FFPT only as a transport instrument appears to have serious limitations, and is prone to (mis)understanding this policy as senseless and irresponsible—as one of the quotes opening this paper emphatically expresses—rather than help to explain why and how it actually functions in

nearly 100 cities and towns worldwide. Researching FFPT thus requires expanding the analytical lens to embrace a variety of environmental, social, and political arguments—many of which are developed and discussed outside academia—that frame the question of fare abolition in different terms altogether. These arguments demonstrate the importance of complementing transport-focused inquiries into ticket-free programmes by studying their social impact, the power relations that undergird them, the working conditions they offer, and the way they envision the position of passengers. Equally relevant seems analysing spatial dynamics caused by FFPT, the political trajectory that it follows from its conception to implementation in different urban contexts, and the wider political project it may signal. These questions could well be examined in studies centring on individual cases of FFPT, bringing empirical material from various localities, or employing a trans-local perspective on growing international network of cities and towns engaged in ticket-free systems. Such a research agenda explicitly recognises that although FFPT is firmly anchored in the field of transport, it cannot be understood as transport policy alone.

### **Acknowledgments**

I would like to thank David Bassens, Mathieu Van Criekingen and Frédéric Dobruszkes for many inspiring comments and conversations around the numerous draft versions this paper. Needless to say, none of the two bears any responsibility for the arguments presented here, which remain my own.

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## Appendix

Table 3. List of existing cases of full FFPT.

City	Country	Year of introduction	Population <sup>i</sup>	Territorial status	Level of administrative division
<b>Europe</b>					
Akureyri	Iceland	2007	18294	regional capital	first-level
Arcachon	France	2005	10831	<i>arrondissement</i> seat, suburban municipality	third-level
Aubagne	France	2009	104788	agglomeration of suburban municipalities	fourth-level
Avesta	Sweden	2012	22781	municipality	second-level
Bełchatów	Poland	2014	58667	county seat	second-level
Brodnica	Poland	2016	28471	county seat	second-level
Castres-Mazamet	France	2008	81564	<i>arrondissement</i> seat (Castres); agglomeration of municipalities (Castres-Mazamet)	third-level
Châteaudun	France	2009	13567	<i>arrondissement</i> seat	third-level
Châteauroux	France	2001	77318	<i>arrondissement</i> seat	third-level
Cluses	France	2008	18044	<i>canton</i> seat	fourth-level
Compiègne	France	1975	74075	<i>arrondissement</i> seat	third-level
Figeac	France	2003	10580	<i>arrondissement</i> seat	third-level
Frydek-Místek	Czech Republic	2011	56879	county seat	second-level

CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

<b>City</b>	<b>Country</b>	<b>Year of introduction</b>	<b>Population<sup>i</sup></b>	<b>Territorial status</b>	<b>Level of administrative division</b>
Gaillac	France	2014	14626	<i>canton</i> seat	fourth-level
Gap	France	2005	42156	department capital	second-level
Gibraltar	Gibraltar	2011	33140	British Overseas Territory	first-level
Głowno	Poland	2015	14590	<i>gmina</i>	third-level
Głucholazy	Poland	2016	13925	<i>gmina</i>	third-level
Goleniów	Poland	2014	35716	county seat	second-level
Gostyń	Poland	2014	20168	county seat	second-level
Graulhet	France	2013	12072	<i>canton</i> seat	fourth-level
Hallstahammar	Sweden	2006	15645	municipality	second-level
Ikast-Brande	Denmark	no data	40798	municipality	second-level
Kiruna	Sweden	2011	23178	municipality	second-level
Kose	Estonia	2017	7183	rural municipality	second-level
Kościerzyna	Poland	2015	23744	county seat	second-level
Libourne	France	2009	24567	suburban <i>arrondissement</i> seat	third-level
Livigno	Italy	no data	6389	<i>comune</i>	third-level
Lubin county	Poland	2014	106319	county	second-level
Lugoj	Romania	2013	37700	municipality	second-level
Łaziska Górne	Poland	2016	37700	<i>gmina</i>	third-level

## CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

City	Country	Year of introduction	Population <sup>i</sup>	Territorial status	Level of administrative division
Manosque	France	2010	23123	<i>commune</i>	sixth-level
Mława	Poland	2014	31030	county seat	second-level
Muret	France	2009	91632	suburban <i>arrondissement</i> seat	third-level
Neuves-Maisons	France	2007	29121	suburban <i>arrondissement</i> seat	third-level
Nowogard	Poland	2014	16770	<i>gmina</i>	third-level
Nova Gorica	Slovenia	2006	13290	municipality	second-level
Noyon	France	2008	14303	<i>canton</i> seat	fourth-level
Ockelbo	Sweden	1995	5856	municipality	second-level
Oleśnica	Poland	2017	37450	county seat	second-level
Podkarpackie <sup>ii</sup>	Poland	2014	78816	group of <i>gminas</i> <sup>ii</sup>	third-level
Polkowice	Poland	2014	22535	county seat	second-level
Pont-Sainte-Maxence	France	2006	12827	<i>canton</i> seat	fourth-level
Pruszcz Gdański	Poland	2015	29589	<i>gmina</i>	third-level
Senlis	France	2000	16264	suburban <i>arrondissement</i> seat	third-level
Stryków	Poland	2007	3492	<i>gmina</i>	third-level
Śrem	Poland	2016	29983	county seat	second-level
Środa Wielkopolska	Poland	2015	22740	city-county	second-level
Tallinn	Estonia	2013	423420	national capital	first-level

## CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

City	Country	Year of introduction	Population <sup>i</sup>	Territorial status	Level of administrative division
Tomaszów Mazowiecki	Poland	2016	63960	county seat	second-level
Torreveja	Spain	2011	88447	municipality	fourth-level
Tórshavn	Faroe Islands	2007	20521	regional capital	first-level
Velenje	Slovenia	2011	25935	municipality	second-level
Vitré	France	2001	77581	<i>canton</i> seat	fourth-level
Ząbki	Poland	2011	33818	suburban <i>gmina</i>	third-level
Żory	Poland	2014	61945	city-county	second-level
<b>North America</b>					
Amherst, MA	United States	1976	37,819	municipality	third-level
Bozeman, MT	United States	2001	43405	county seat	second-level
Breckenridge, CO	United States	1997	4540	county seat	second-level
Cache Valley, UT	United States	1992	112656	county	second-level
Chapel Hill, NC	United States	1974	57233	municipality	third-level
Clemson, SC	United States	1996	13905	municipality	third-level
Commerce, CA	United States	1962	12823	suburban municipality	third-level
Corvallis, OR	United States	2012	54462	municipality	third-level
Crested Butte, CO	United States	1979	1487	municipality	third-level
Deerfield Valley, VT	United States	1996	5911	group of municipalities	third-level

CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

<b>City</b>	<b>Country</b>	<b>Year of introduction</b>	<b>Population<sup>i</sup></b>	<b>Territorial status</b>	<b>Level of administrative division</b>
Edmund, OK	United States	2009	81405	suburban municipality	third-level
Estes Park, CO	United States	2006	5858	municipality	third-level
Indian River County, FL	United States	1994	138028	county	second-level
Island County, WA	United States	1987	78506	county	second-level
Kootenai County, ID	United States	2005	144000	county	second-level
Los Alamos, NM	United States	2007	12019	county seat	second-level
Macomb, IL	United States	1999	21516	county seat	second-level
Mammoth Lakes, CA	United States	2006	8234	municipality	third-level
Mason County, WA	United States	1992	60699	county	second-level
Missoula, MT	United States	2015	66788	county seat	second-level
Niles, IL	United States	no data	29803	municipality	third-level
Steamboat Springs, CO	United States	1991	12088	county seat	second-level
Taos, NM	United States	2007	178902	county seat	second-level
Upper Valley, NH/VT	United States	2002	38000	group of municipalities	third-level
Watauga County, NC	United States	1981	51079	county	second-level
Wilsonville, OR	United States	1989	19509	municipality	third-level
<b>South America</b>					
Agudos, SP	Brazil	2002	36704	municipality	second-level

## CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

City	Country	Year of introduction	Population <sup>i</sup>	Territorial status	Level of administrative division
Anicuns, GO	Brazil	no data	21614	municipality	second-level
Eusebio, CE	Brazil	2010	51913	suburban municipality	second-level
Itatiaiuçu, MG	Brazil	2015	10882	municipality	second-level
Ivaiporã, PR	Brazil	2001	32715	municipality	second-level
Maricá, RJ	Brazil	2013	149876	municipality	second-level
Monte Carmelo, MG	Brazil	1994	44367	municipality	second-level
Paulínia, SP	Brazil	2013	100128	suburban municipality	second-level
Porto Real, RJ	Brazil	1994	18552	municipality	second-level
Potirendaba, SP	Brazil	1998	16857	municipality	second-level
Silva Jardim, RJ	Brazil	2014	21279	municipality	second-level
<b>Australia &amp; Oceania</b>					
Manly	Australia	no data	15072	suburban <i>local government area</i>	second-level
<i>Asia</i>					
Changning, Hunan	China	2008	332927	county-level city	third-level
Kangbashi, Inner Mongolia	China	2015	100,000	urban district	fourth-level

<sup>i</sup> Population figures refer to the administrative boundaries of the localities listed, and the year of FFPT implementation, or the closest available data after FFPT implementation. Data sources: AD Statistiek, Amt für Statistik Berlin-Brandenburg, Brazilian Institute of Geogra-

## CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

phy and Statistics, Central Statistical Office of Poland, Czech Statistical Office, Government of Gibraltar, Hagstova Føroya, Insee (Institut national de la statistique et des études économiques), Institutul National de Statistica, National Statistics Institute of Spain, Statistical Office of Slovenia, Statistics Canada, Statistics Estonia, Statistics Sweden, US Census Bureau, citypopulation.de (Changning), and forbes.com (Kangbashi).

<sup>ii</sup> Rzeszów: Podkarpacka Komunikacja Samochodowa (Boguchwała, Głogów Małopolski, Chmielnik, Trzebownik, Czarna)

CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

Table 4. List of discontinued cases of full FFPT.

City	Country	Timeframe	Population <sup>i</sup>	Territorial status	Level of administrative division
Austin, TX	United States	October 1989–December 1990	465.622	county seat	second-level
Bologna	Italy	1973–1975	490.528	provincial capital	second-level
Bar-le-Duc	France	2008–2014	19.559	department capital	second-level
Chelan–Douglas Counties, WA	United States	December 1991–December 2000	99.219	county	second-level
Colomiers	France	1971–2016	38.695	suburban <i>arrondissement</i> seat	third-level
Denver, CO	United States	February 1978–January 1979	492.694	state capital	first-level
Hasselt	Belgium	1996–2014	75.991	provincial capital	second-level
Hawaii County, HI	United States	no data	185.326	county	second-level
Kristinehamn	Sweden	1997–2001	17,839	municipality	second-level
Lübben	Germany	1998–2002	14.897	<i>Kreisstadt</i>	third-level
Mercer County, NJ	United States	March 1978–February 1979	307.863	county	second-level
Monterey Park, CA	United States	1986–1988	60.738	suburban municipality	second-level

CHAPTER 4: MORE THAN JUST RIDING WITHOUT A TICKET?

<b>City</b>	<b>Country</b>	<b>Timeframe</b>	<b>Population<sup>i</sup></b>	<b>Territorial status</b>	<b>Level of administrative division</b>
Rome	Italy	December 1971-June 1972	2.781.000	national capital	first-level
Templin	Germany	1997-2003	17.773	<i>Gemeine</i>	fourth-level

ii As in Table 3 above.

## Chapter 5

**What the sustainable mobility  
paradigm does not see:  
a critical view  
on fare-free public transport  
in Aubagne, Tallinn and Chengdu**

# What the sustainable mobility paradigm does not see: a critical view on fare-free public transport in Aubagne, Tallinn and Chengdu

WOJCIECH KĘBŁOWSKI

This chapter has been submitted to the Virtual Special Issue of *Transportation Research Part A: Policy and Practice* titled *Moving past sustainable transport studies: towards a critical perspective on urban transport*, and is currently under review.

## Abstract

In line with the underpinning theme of the virtual special issue, the ambition of this paper is to show pathways for moving past the “sustainable mobility paradigm”. To demonstrate its limitations, the paper focuses on fare-free public transport as a striking case of a policy that although exists in full form in nearly 100 cities and towns worldwide, is frequently belittled by sustainable transport scholars and practitioners. According to them, FFPT “does not makes any sense” as it (1) may reduce income from tickets and therefore constitutes a financial harm to transport operators, and it (2) acts to the detriment of sustainable mobility by supposedly failing to attract car drivers to collective transport. The paper confronts this criticism by referring to empirical material from three FFPT programmes in Aubagne (France), Tallinn (Estonia) and Chengdu (China). As this evidence only partially supports the “sustainable” accusations against fare abolition, the paper turns to a series of “critical” questions, which albeit frequently asked by critical urban scholarship, appear much less commonly addressed by transport researchers. It thereby looks into how FFPT may act as inherently public and social policy, a territorial strategy of inter-municipal solidarity, and as a harbinger of “urban utopia.” The paper thus demonstrates the necessity and urgency of studying transport policies beyond their impact on mobility patterns—understanding them as urban policies as much as transport policies.

## Keywords

transport policy, sustainable transport, critical transport, fare-free public transport, free transit, public transport

## 1. Introduction

The premise of this special issue is that transport research needs to urgently move past the currently dominant perspectives on urban transport, which continue to view and assess their subject matter primarily against its anticipated contribution to the so-called “sustainable” development. The theoretical viewpoint on transport they advance, and the resultant policy agenda they advocate—perhaps best synthesised and conceptualised as the “sustainable mobility paradigm” (Banister, 2008; Banister & Hickman, 2013; Inderwildi & King, 2012; Low & Gleeson, 2003)—highlights a series of undoubtedly important concerns. Notably, it has demonstrated the importance of establishing stronger links between land-use and transport planning, and has identified car-based mobility as crucial barrier to improving urban environment, “liveability,” and “quality of life” (Gerber, Ma, Klein, Schiebel, & Carpentier-Postel, 2017).

However, framing transport research around the issue of “sustainability” involves significant limitations and pitfalls. To begin with, this set of approaches does not seem to offer a profound reflection on the predominantly technical and allegedly “rational” character of transport. It further does not appear to have the ambition to challenge fundamental orthodoxies shaping the contemporary transport debate (Kębłowski & Bassens, 2017; Schwanen, 2016), which hinge on largely technocratic and a-political definitions of “efficiency” and “modernity” (Karlaftis & Tsamboulas, 2012; Pternea, Kepaptsoglou, & Karlaftis, 2015), “smartness” and “success” (Eliasson, 2014; Lyons, 2016). Instead, sustainable transport scholars appear to be particularly interested in elaborating these notions and transforming them into technological and behavioural solutions (Etminani-Ghasrodashti & Ardeshiri, 2015; Hickman, Saxena, Banister, & Ashiru, 2012; Reigner, 2016), rather than in outlining and addressing the inherently political roots of “un-sustainability” that characterises contemporary urban transport systems.

Furthermore, and perhaps even more importantly, the scientific inquiry proposed by the sustainable transport paradigm is often limited to questions related to traffic and movement. This entails investigating the extent to which specific transport agendas, instruments and infrastructural projects can help to reduce car-based mobility, facilitate a modal shift towards collective means of transport, or promote “soft” modes such as bicycling and walk-

ing—in the name of increasing urban “attractiveness,” “vibrancy” and “vitality” (Banister, 2011). However, this outlook seems to encourage scholars to view urban transport policies as objects that merely occur in cities, rather than as inherently urban policies that relate to the question of movement. Put simply, when inquiring into urban transport, the focus of the sustainable mobility paradigm appears to be on *transport* rather than on the *urban*. The resultant dis-embedding of transport policies from urban contexts in which they are conceived, developed and contested contributes to framing transport as a technical rather than social science. As a result, the analytical lens through which urban transport is analysed may not allow to recognise a series of political, social and spatial issues by which it is underpinned.

Meanwhile, however, the centrality of these issues has been highlighted by a variety of “critical” perspectives on transport (Kębłowski & Bassens, 2017). They have demonstrated that beyond its technical dimension, transport acts as a vehicle of urban governance (Enright, 2016), regime-building (Zitouni & Tellier, 2013), spatial revanchism (Soja, 2010), politics of class (Reigner, Brenac, & Hernandez, 2013) and gender (Levy, 2013), or a rallying call for urban democracy and empowerment of urban inhabitants (Larrabure, 2016). The “critical” capacity of these approaches lies in their continuous attempt to de-centre the transport debate by demonstrating that urban transport policies and projects are not (only) about transport—they are first and foremost instances of urban politics, not least visible in the emergence of transport-related urban regimes.

The first aim of the paper is to add to this work by demonstrating a series of limitations of the sustainable mobility paradigm by referring to the policy of fare-free public transport (FFPT). FFPT exists in full form in at least 96 cities and towns worldwide, where most of the services provided by local transport operators can be used free of charge, and by the vast majority of their users (Kębłowski, 2017). Despite functioning in diverse and geographically variegated localities, FFPT has faced sharp criticism from sustainable transport scholars. According to Vincent Kaufmann, one of most prominent proponents of sustainable mobility, abolishing fares simply does “makes not sense” (CERTU, 2010). It has been criticised for endangering local transport operators and local governments by reducing or even eliminating income from public transport (PT) tickets. It apparently fails to attract car drivers to collective transport, who are more responsive to increase of PT quality rather

than decrease of its prices (Cats, Susilo, & Reimal, 2017; De Witte et al., 2006; Duhamel, 2004; Fearnley, 2013; Storchmann, 2003; van Goeverden, Rietveld, Koелеmeijer, & Peeters, 2006). This leads to the accusation that FFPT is detrimental to the shift to sustainable transport, as the policy of reducing PT prices to zero apparently leads to a significant decrease of service quality, and therefore contradicts efforts towards improving the quality of PT to attract car users (FNAUT, 2011; UTP, 2011).

This paper confronts this criticism by referring to empirical material from three PT systems in which fares have been fully or partially abolished: in Aubagne (France), Tallinn (Estonia) and Chengdu (China). Having introduced each of these case studies (in Section 2), their experiences with FFPT are analysed to provide answers to critical arguments raised by sustainable transport scholars (in Section 3). This analysis is further expanded (in section 4) by addressing the policy of fare abolition with several questions inspired by “critical” approaches to urban transport, which study transport as an inherently urban phenomenon (Kębłowski & Bassens, 2017). This part of the paper demonstrates how FFPT may challenge neoliberal transport agendas by emphasising the inherently public and social dimension of PT (in Tallinn), and how it can function as a solidarity-driven territorial strategy (in Aubagne), or act as a harbinger of an urban utopia (in Chengdu).

FFPT is thus confronted with questions that are frequently asked by critical urban scholarship, yet appear much less commonly formulated by urban transport researchers. Herein lies the second objective of the paper: to demonstrate the necessity and urgency of studying transport policies by asking questions that do not only relate to mobility patterns. Therefore, *transport* policies are explicitly framed *urban* policies, related a variety of urban issues including—but certainly not limited to—power relations and urban democracy, scale and space, class and society. Finally, by demonstrating that transport may act as an entry point to study urban issues writ large, the paper indicates pathways for transcending the limits of the sustainable perspectives on transport, and for contributing to critical transport scholarship.

## 2. Introduction to case studies and methodology

The fare abolition programmes in Aubagne (France), Tallinn (Estonia) and Chengdu (China) hold different positions in the global landscape of FFPT (Kębłowski, 2017). Aubagne is one of the most important cases of FFPT in France, where free rides are offered in 20 towns and cities, placing France alongside Poland (21 fare-free programmes) as an important centre of FFPT. Tallinn's PT system is the largest existing case of full fare abolition, while Chengdu is the most populated area to have ever experimented with partial fare abolition.

Profound differences exist between these three urban contexts for fare abolition. Aubagne is a small town (population of 45,128<sup>1</sup>) located in the periphery of Marseille, at the heart of former Communauté d'agglomération du pays d'Aubagne et de l'Étoile (Agglomeration community of Pays d'Aubagne et de l'Étoile, CAPAE; population of 104,018), which gathers further 11 municipalities. In the last four decades, CAPAE has experienced suburbanisation, which led to a slow but steady growth of its population (+1% between 2009 and 2014). Nearly two-thirds of the agglomeration's residents who are salaried workers commute to jobs outside CAPAE, primarily to Marseille. Particularly important for understanding the rationale behind the local fare abolition programme is the deepening inequality between Aubagne and other CAPAE municipalities. While the former hosts a large concentration of inhabitants belonging to the working-class or the urban poor, the latter has predominantly middle- and upper-class character (Inclusive Cities Observatory, 2010), its landscape combines smaller towns and semi-urban territories of former villages. CAPAE's PT network spans across this socio-spatial divide. Operated by French multi-national TransDev, it is composed of 11 regular bus lines, 13 school bus lines, and a single tram line (see *Figures 1a* and *1b* below). Alongside the free system, 7 paid departmental routes are provided by another operator, CarTreize. From 15<sup>th</sup> May 2009 onwards, access to vehicles run by TransDev is unconditionally free of charge for all passengers, regardless of their official status or place of residence. Accordingly, tickets are not issued anymore. This step has been accompanied by a modernisation of the network: new regular and on-demand bus lines have been designed, and bus frequencies have been increased across the network.

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<sup>1</sup> Unless noted otherwise, population statistics for CAPAE refer to the year of 2014.

CHAPTER 5: WHAT THE SUSTAINABLE MOBILITY PARADIGM DOES NOT SEE

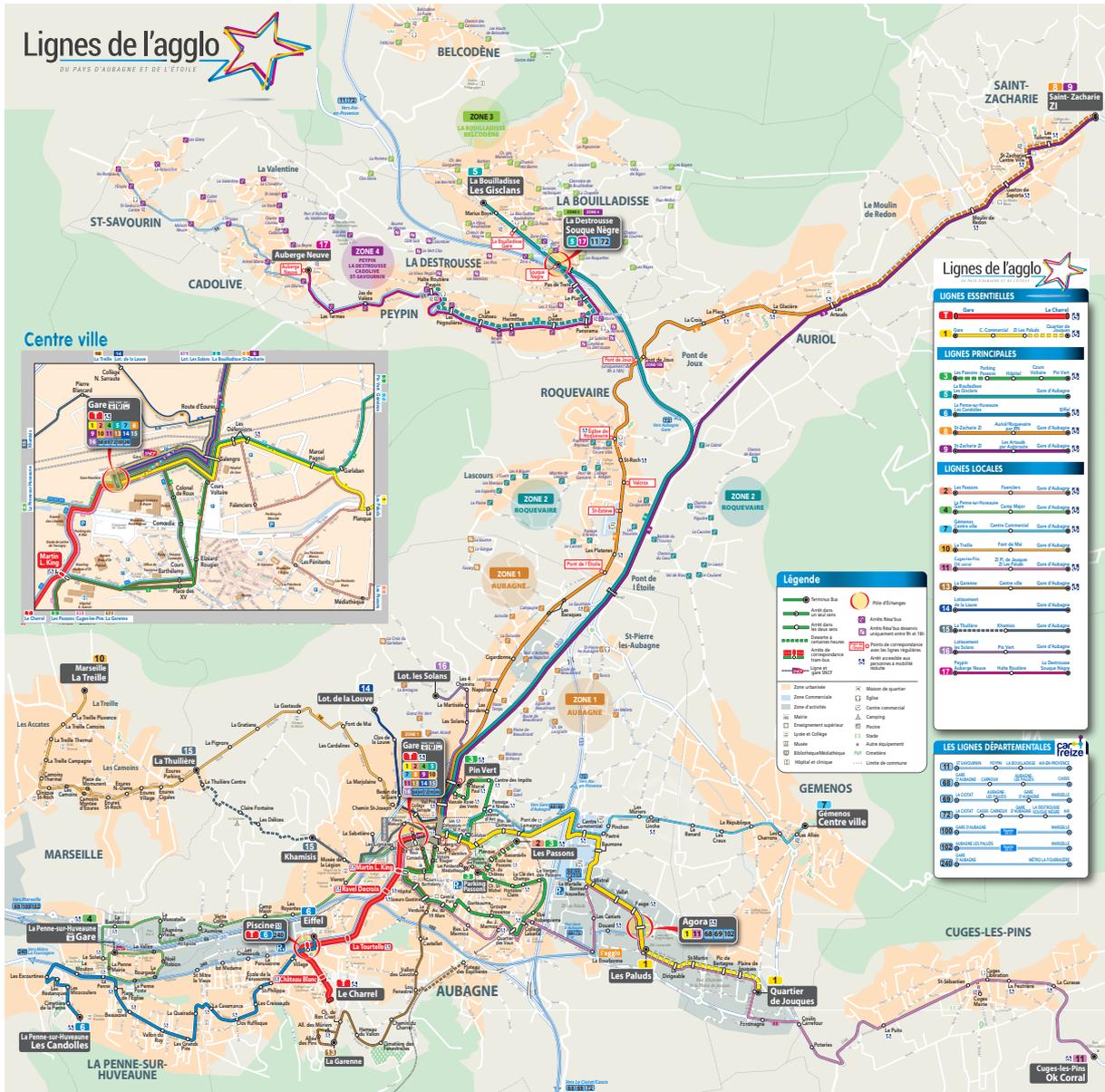
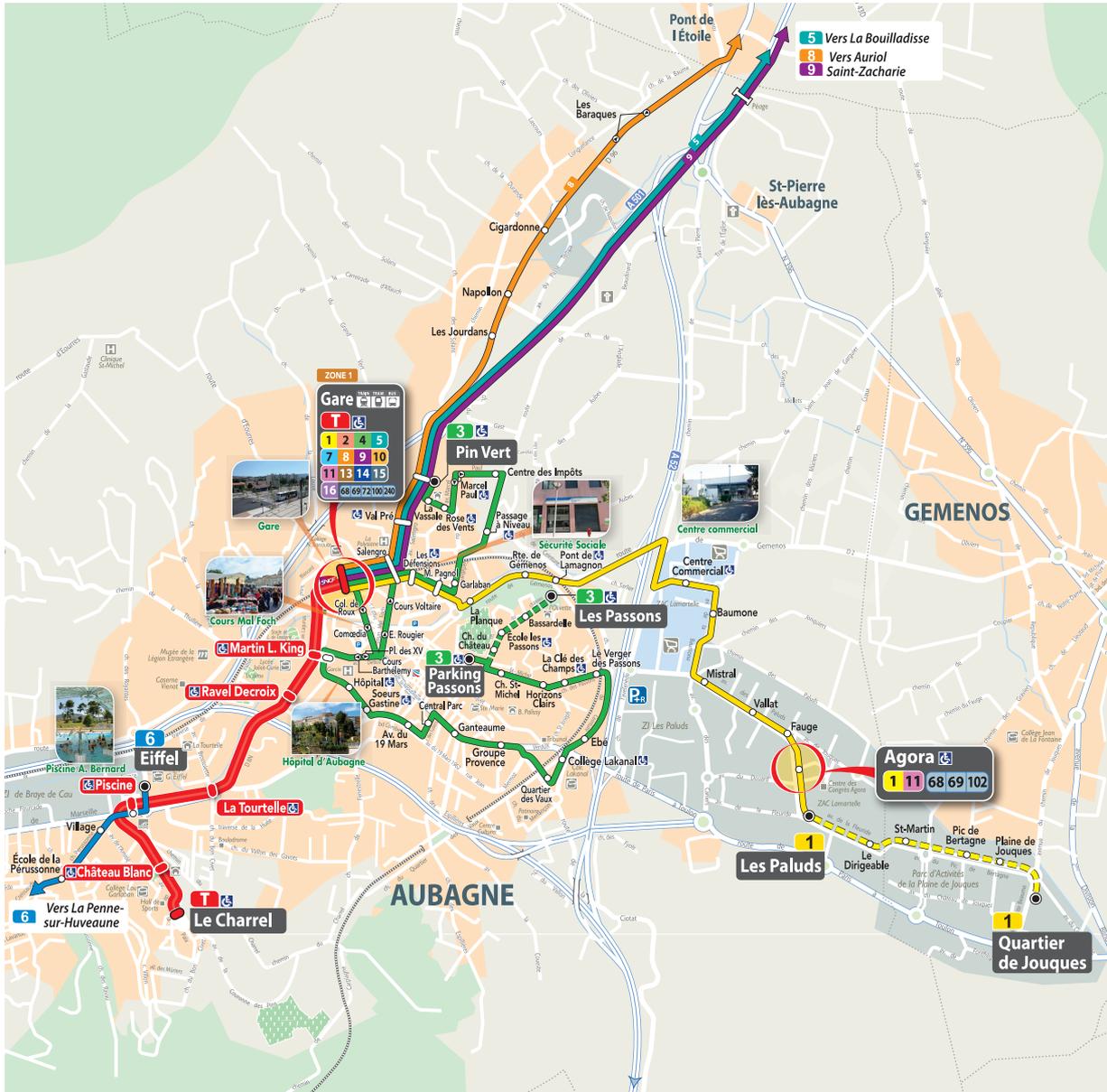


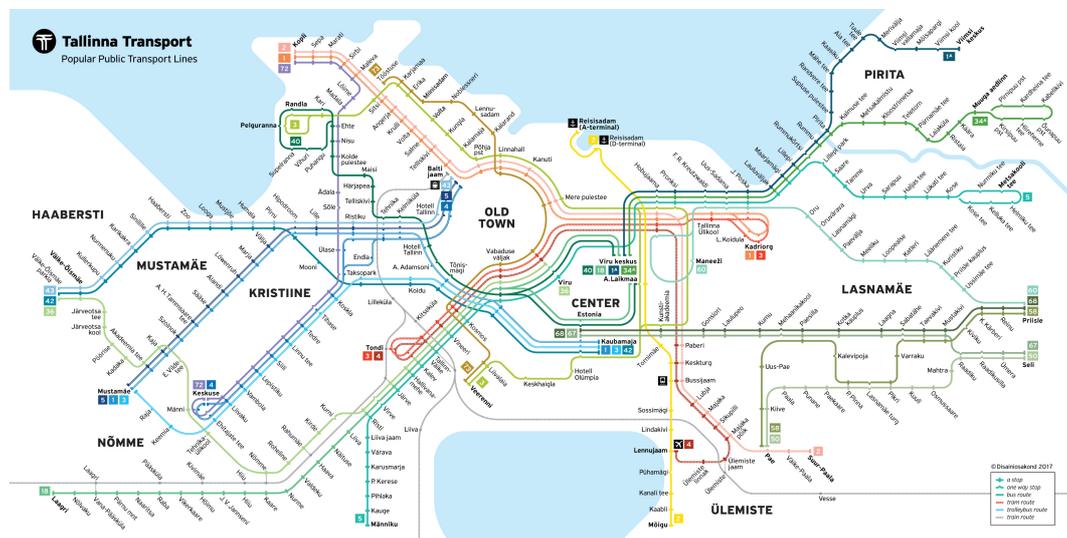
Figure 1a (above) and Figure 1b (below, next page) show the PT network in CAPAE and Aubagne, respectively. CAPAE’s only tram line (route T) is marked in red. Bus lines (routes 2–17) run by TransDev are multi-coloured, while departmental paid routes operated by CarTreize are marked in grey. Source: Lignes de l’agglomération.



The capital city of Estonia, Tallinn is a significantly larger than Aubagne, with the population of 443,623<sup>2</sup>. Ever since its population suddenly dropped following the collapse of the Soviet Union in 1991, Tallinn has attracted new residents from across the country. Consequently, its population and contribution to the national GDP have grown at much faster pace than in

<sup>2</sup> Data for January 2017, obtained from the official website of the municipality of Tallinn: <http://www.tallinn.ee/est/Tallinna-elanike-arv>.

other parts of Estonia. At the same time, the city has experienced suburbanisation (Leetmaa & Tammaru, 2007), resulting in steady migration of middle-class Estonian-speaking population to municipalities located up to 40 kilometres from Tallinn borders, and simultaneous increase of the proportion of working-class, lower-income and ethnic Russians in the city proper. Tallinn’s PT system is almost entirely contained within the city limits. It consists of 74 bus routes, and 8 routes of trams and trolleybuses (see *Figure 2* below). Introduced on 1<sup>st</sup> January 2013, free rides are available to officially registered residents of the city, who have right to purchase a “zero ticket” that has to be validated at each journey. Visitors and tourists continue to pay fares, and therefore the ticketing system has been maintained. The decision to abolish fares was accompanied by a long-term agenda of significant increase of PT quality, which until recently reflected the Soviet rather than Western European standards, as the rolling stock was old, unreliable, poorly heated and ventilated, and energy-inefficient (Grava, 2007). Therefore, in the years preceding fare abolition, the Tallinn municipality began to designate priority bus lanes, re-



*Figure 2.* Schematic map of selected routes in Tallinn’s PT network. Source: Tallinna Linnatranspordi AS.

new the PT vehicle fleet, introduce electronic information system on board of vehicles and at key stations and stops. It also made steps towards replacing paper tickets with rechargeable “smart” cards. Furthermore, prior to the introduction of FFPT, Estonian railways completed major re-development works across the national rail network that can be used within Tallinn borders as an urban mode of PT, and replaced the entire train fleet with new Stadler trains.

Chengdu, the largest city to have experimented with fare abolition, is the capital of the Sichuan province, and one of the fastest growing metropolitan areas in China. In 2014, its “urban core” contained within the city’s fourth ring road had the population of over 10 million inhabitants, while an additional 4,5 million lived in the outer agglomeration (*Sichuan Statistical Yearbook 2015*, 2015). Transport is considered as one of key instruments that can help to both contain and facilitate this growth by responding to the continuous extreme increase of mobility, in particular by car. At the end of 2015, at least 3,29 million private vehicles were owned by Chengdu’s inhabitants (*Sichuan Statistical Yearbook 2016*, 2016). Ever since 2014, the number of registered cars went up by at least 2,000 per day, which means that at the end of 2017 at least 4,75 million vehicles were owned in Chengdu—although the actual figure is likely to be much higher. To respond to this car boom, the city’s currently operating seven metro lines are scheduled to be joined by six more by 2021. However, it is in the bus network that the fares have been partially removed. The network consists of 4 bus rapid transit (BRT) lines, approximately 400 cross-city bus routes and 116 “community bus” routes (社区巴士, *shèqū bāshi*), which operate on short distances between 1 and 3 kilometres long. The partial abolition of fares in Chengdu has taken three distinct forms. First, during major construction works on the city’s 2<sup>nd</sup> ring road from 11<sup>th</sup> October 2012 to 30<sup>th</sup> June 2013, to compensate for reduced car mobility, fares were temporarily suspended on 44 regular lines that run across the area between the 2<sup>nd</sup> and the 3<sup>rd</sup> ring road. Second, since 1<sup>st</sup> July 2013 all bus lines are free to use every day before 7am. Third, all “community bus” routes have been free to use at any time of the day. Partial FFPT can be used by validating an electronic ticket; otherwise, passengers must pay 0,24€<sup>3</sup> per ride. This means that the ticketing system continues to operate, and bus drivers control the tickets upon boarding.

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<sup>3</sup> In the discussion about Chengdu’s FFPT, all figures have been converted from RMB (Chinese Yuan): €1 = 7,5 RMB.

Thus, the three cases of FFPT are located in three extremely different urban contexts, and three distinct urban scales: a low-density community of a dozen small municipalities (Aubagne), a medium-sized capital city (Tallinn), and a rapidly growing metropolis (Chengdu).

To analyse these cases of FFPT, a mixed-method analysis was conducted between December 2015 and May 2017, involving multiple fieldwork stays in Aubagne, Tallinn and Chengdu. It embraced, first, a review of existing mobility surveys, policy reports, official documents and media articles regarding the local mobility situation in general and FFPT programmes in particular. Second, approximately 70 interviews with key local stakeholders were conducted. They included municipal officials and transport authorities, representatives of PT operators, and—in Aubagne and Tallinn—local politicians, NGO representatives and workers of local PT companies.

### **3. Analysis: (mis)understanding FFPT from the perspectives of sustainable transport.**

From the perspective of sustainable transport, two sets of reasons are stated against free public transport. First, the abolition of fares is criticised as a measure that is financially harmful to PT operators and their funding authorities, as it involves a significant reduction or complete disappearance of ticketing revenue. This allegedly contradicts the “economic reality” (FNAUT, 2015) of transport market, in which fares are expected to generate income that at least partially funds the PT service. Second, FFPT is criticised as detrimental to sustainable mobility, and it is questioned whether zeroing fares can make a genuine impact on mobility patterns, in particular in terms of generating a modal shift from private vehicles to PT (Cats et al., 2017; Fearnley, 2013; van Goeverden et al., 2006). Furthermore, eliminating tickets is presented as a measure that counters efforts towards increasing PT quality. Thus, local decision-makers and PT operators apparently face the choice between providing collective transport service of high quality, or a poor service at low or no price (FNAUT, 2015; UTP, 2011).

To verify the validity of these critiques, below I bring empirical evidence from FFPT programmes in Aubagne, Tallinn and Chengdu to verify whether FFPT has indeed acted to the detriment of the financial structure of local PT networks, and has failed to making local mobility patterns more sustainable, in particular in terms of generating a modal shift from cars to PT.

### 3.1. FFPT: financially harmful?

Prior to the introduction of FFPT, a regular single fare in Aubagne cost 1€, while 20,5€ was charged for a non-discounted 50-ride travelcard—the latter in 2008 amounted to approximately 1,5% of average monthly net wage (insee.fr, 2017). However, as 22% of trips were made free of charge (ATT-CAREX, 2006), and fare-dodging was common, the revenue from fares amounted to merely 8,6% of the network's operational budget. This indicates that the transition to a fare-free system did not constitute a significant cost to the local authorities. Moreover, this transition partially enabled CAPAE to increase *versement transport*, a tax that French municipalities can collect from companies of more than 11 employees<sup>4</sup>, which prior to FFPT was paid by approximately 9% of local companies. Following the French law, this tax—calculated on the basis of the total income received by all employees of the companies in question—could first be increased from 0,6% to 1,05% in 2009, when CAPAE passed the threshold of 100,000 inhabitants. The second increase (to 1,8%) was possible once CAPAE committed to constructing a right-of-way tram line—a project that should be seen as integral to the shift towards a fare-free network, as zeroing fares was accompanied by thorough redesign and improvement of the PT network. Both tax increases were supported by local business and allowed to raise the annual revenue from *versement transport* from €3,2m to €8,9m (Sagot-Duvauroux & Giovanangelli, 2012). As shown in *Table 1* belows, this transfer from the private sector to public services constituted an additional revenue of €5,7m, which together with operational savings (€160,000) largely covered the cost of fare abolition estimated at €1,57m (710,000€ for the lost revenue from fares, and 860,000€ for costs related to increased demand for PT; CAPAE, 2013).

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<sup>4</sup>At the time of FFPT introduction, the law concerned companies of more than 9 employees.

<sup>5</sup>Data gathered in Chengdu not yet sufficiently detailed to include its FFPT programme in this comparison.

	<b>Aubagne</b>	<b>Tallinn</b>
<b>Finances before FFPT</b>		
full single fare	1 €	1 €
full monthly fare	20,5 € <sup>i</sup>	20 €
as % of local average monthly net wage	1,5%	2,4%
share of fare revenue in operational PT budget (%)	8,6%	33%
<b>Costs and revenues related to FFPT</b>		
lost revenue from fares	-710 000 €	-12 200 000 €
costs related to increased demand	-860 000 €	-11 700 000 €
operational savings	160 000 €	0 €
additional revenues and savings raised in relation with FFPT	5 700 000 €	40 000 000 €
<b>total</b>	<b>4 290 000 €</b>	<b>16 100 000 €</b>

Note: Data “before”/“after” FFPT refers to 2008/2009 in Aubagne and 2012/2013 in Tallinn.

<sup>i</sup>No monthly travel cards were available. Instead, a travelcard entitling to 50 trips was offered.

*Table 1.* Financial aspects of FFPT implementation in Aubagne and Tallinn. Sources: ATT-CAREX (2006), CAPAE (2013), Cats et al. (2014), Cats et al. (2016), Sagot-Duvaurox & Giovanangelli (2012), and semi-structured interviews with local transport authorities and operators.

The abolition of fares allowed to generate significant revenue in Tallinn, too. Before the introduction of FFPT, a regular single fare cost 1€, while a monthly travelcard was valued at 20€, which in 2012 corresponded to 2,4% of average monthly net wage in Tallinn<sup>6</sup>. 36% of trips made by PT were free of charge, as there were 17 categories of passengers entitled to free tickets. Further 24% of passengers (divided into 6 categories) had access to reduced fares. As a result, only 8% of passengers paid full fares<sup>7</sup>. In 2012, the year before the introduction of FFPT, the income from tickets amounted to €16,2m, which covered approximately one third of the network's operational budget—a low figure comparing to majority of European cities (Cats, Reimal, & Susilo, 2014)—while the remaining two-thirds were provided by a direct municipal subsidy. Crucially, free fares were provided in Tallinn only to registered residents. This strategy of financing fare abolition was possible as local municipalities in Estonia have the right to collect part of their residents' personal income tax. Between May 2012 (seven months before the actual implementation of FFPT) and May 2016 the number of Tallinn residents increased by approximately 25,000. As the average tax contribution per resident amounts to 1600€ per year (Tallinn municipality, 2017), this meant generating €40m of additional revenue per annum. Consequently, the share of free trips increased from 36% in 2012 to 95% in 2015, and revenues from tickets sales decreased from €16,2m in 2012 to €4,0m in 2015, incurring a cost of €12,2m<sup>8</sup>. At the same time, to respond to increased demand and to improve PT frequency, its annual operational budget of increased by €11,7m from 2012 to 2016. Overall, for the municipality of Tallinn abolishing fares meant a financial gain of €16,1m per year. Thus, FFPT has effectively allowed the Tallinn municipality to generate additional annual revenue.

While in Aubagne and Tallinn the amount of savings generated in relation to FFPT rather surprised the local authorities<sup>9</sup>, the partial fare abolition in Chengdu was explicitly conceived as a cost-cutting measure. A single fare

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<sup>6</sup>Source: Statistics Estonia database (<http://pub.stat.ee>).

<sup>7</sup>Semi-structured interview with an official at Tallinn's municipal transport department.

<sup>8</sup>Semi-structured interview with an official at Tallinn's municipal transport department.

<sup>9</sup>Semi-structured interviews with (i) a member of Tallinn's municipal transport department and (ii) a former member of the Council of CAPAE.

in the local bus network is priced at 0,24€, and the total price of 50 tickets (no monthly travelcards are available) in 2015 amounted to as much as 4,12% of disposable monthly income. However, local officials claim that “income from ticketing is minor comparing to [...] maintenance costs”<sup>10</sup> and therefore neither of the three forms of Chengdu’s partial FFPT constituted a significant expense for the municipality. First, Chengdu Bus Group argues that temporary abolition of fares on 44 regular bus lines “cost [...] hardly anything in terms of ticketing income”<sup>11</sup>. Their calculations show that most passengers either boarded buses before they entered the “free” area between the second and third ring road, or began their journey in that area but later transferred to a “paid” bus. In this case, FFPT acted as a marketing instrument, promoting the use of collective transport during major road works. Second, offering free rides before 7am turned out to be inexpensive for the authorities, as it failed to persuade passengers to begin their journeys before the morning peak. Although no precise counts have been made, it is evident that FFPT was introduced, “very few people [began to] use the buses before 7am before introducing [FFPT], and unfortunately few continue to use it now”<sup>12</sup>. Third, offering free rides on board of the “community buses” costs approximately €214 000 annually, which constitutes merely 0,001% of Chengdu’s massive €19,6bn expenditure budget<sup>13</sup> (*Sichuan Statistical Yearbook 2016*, 2016). However, according to the local transport authorities the community buses allow to “streamline network efficiency”<sup>14</sup>. Operated with “two to three low-capacity vehicles,”<sup>15</sup> they can be used in two major ways, as shown in *Figure 3* below. First, they operate at end sections of particularly long cross-city routes, where they replace regular high-capacity buses. In this case they function as linear extensions of the bus system, and operate on its low-density fringes, as in the case of route 1095. Second, community buses can operate within dense urban areas with narrow streets, where they help passengers to connect to the main, “paid” network: this is the case of routes 1022 and 1076.

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<sup>10</sup> Semi-structured interview with a member of the board of Chengdu’s public bus operator (Chengdu Bus Group)

<sup>11</sup> *Ibid.*

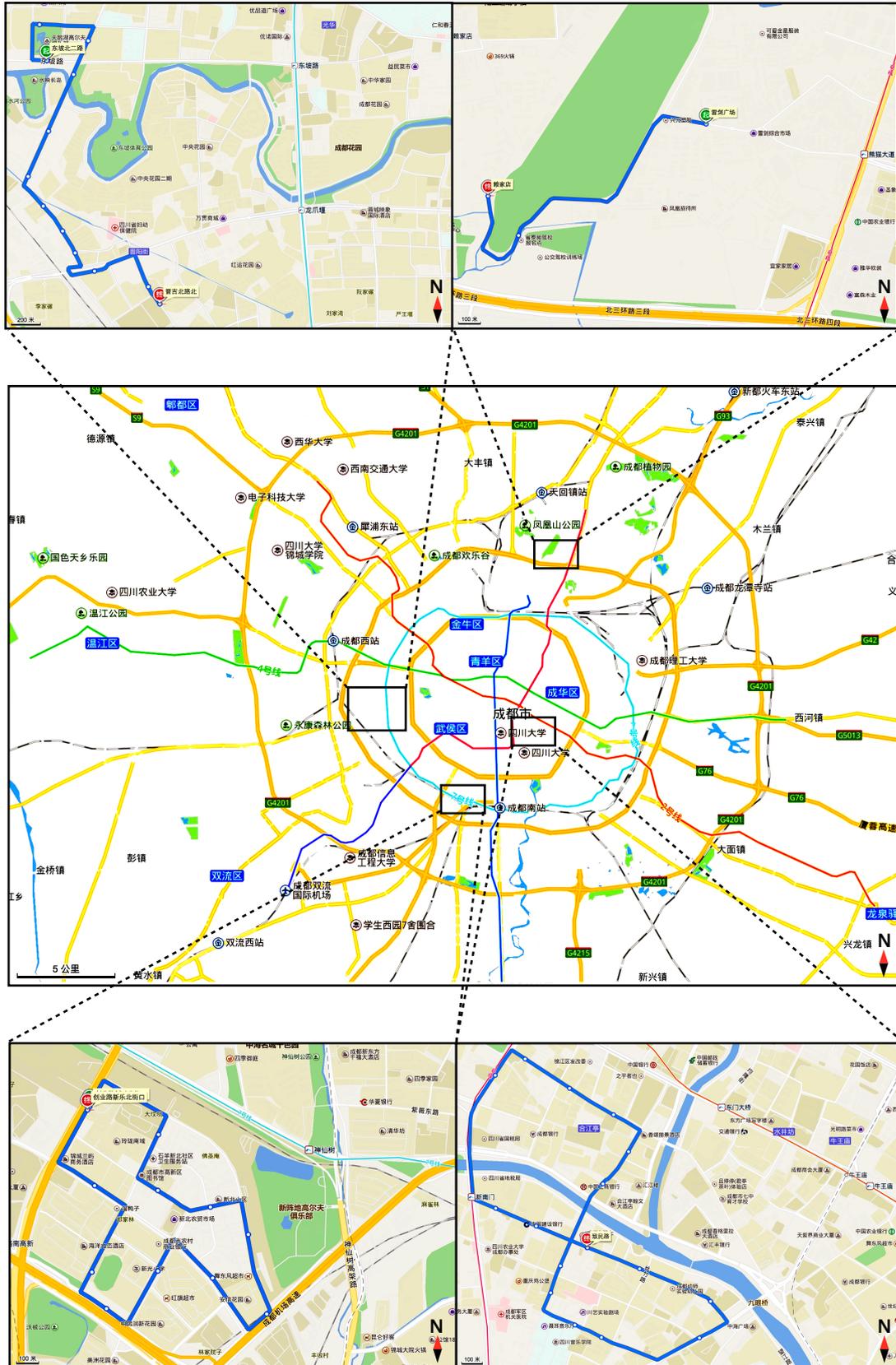
<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.*

# CHAPTER 5: WHAT THE SUSTAINABLE MOBILITY PARADIGM DOES NOT SEE



*Figure 3.* Geography of four selected community bus routes: 1086 (top-left), 1095 (top-right), 1076 (bottom-left) and 1022 (bottom-right). The central map shows the location of the routes in relation to Chengdu’s “urban core”, encircled by the city’s second, third and fourth ring roads, and crossed by seven metro lines (in dark blue, orange, pink, green, turquoise and violet). As shown by the bottom and top maps, the majority of community bus routes operate within the 2<sup>nd</sup> and 3<sup>rd</sup> ring road (e.g. routes 1076, 1086), although some (1095) can also be found past the 3<sup>rd</sup> ring road, or in the city centre (1022). Note: The scale of the top-left map (scale bar: 200m) differs from other three maps displaying particular routes (100m) and the central map (5km). Source: map.baidu.com.

Therefore, losses from abolishing fares in these parts of the network and deterring passengers by introducing additional transfers are smaller than gains made from saving on the use of larger buses.

### 3.2. FFPT: detrimental to sustainable mobility?

The provision of free of charge access to PT has led to a visible increase of the number of passengers in Aubagne, Tallinn and Chengdu.

Prior to fare abolition in Aubagne, the local PT network “was hardly used”<sup>16</sup>. Introducing FFPT triggered a stunning increase of ridership. From 1,9m passengers transported in 2008, passenger volumes increased to 4,48m in 2011 (+135,8%), and stayed at this level throughout 2012 and 2013 (see *Table 2* below). The addition of the tram line led to a further increase from 4,8m trips in 2014 to 5,5m in 2015. Thus, between 2008 and 2015, the ridership nearly tripled (+189,5%)<sup>17</sup>. Before FFPT, the modal split in CAPAE was dominated by private vehicles (71% of trips), and walking (22%), with only minor

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<sup>16</sup> Semi-structured interviews with a representative of the local PT operator (TransDev).

<sup>17</sup> Semi-structured interviews with an ex-member of the Council of CAPAE and representatives of the local PT operator (TransDev).

	Aubagne	Tallinn
<b>FFPT and mobility</b>		
% of free PT trips before FFPT	22%	36%
% of free PT trips after FFPT	100%	95%
change of annual passenger volumes (in millions)	+2,58 / +3,6 <sup>i</sup>	+8,75
change of passenger volumes in %	+135,8% / +189,5% <sup>i</sup>	+14%

Note: Data “before”/“after” FFPT refers to 2008/2009 in Aubagne and 2012/2013 in Tallinn.

<sup>i</sup>The first figure refers to the period from 2008 and 2011, prior to the opening of tram line in 2014. The second figure refers to the period from 2008 and 2015.

*Table 2.* Mobility-related factors related to FFPT programmes in Aubagne and Tallinn. Sources: as in *Table 1* above.

share of PT (5%) and cycling (2%) (ATT-CAREX, 2006). Within Aubagne, the domination of private vehicles was a little less pronounced (60%), and the share of walking was significantly higher (34%) but the share of PT was lower than in CAPAE (3%). It is difficult to establish how the introduction of FFPT affected this situation, as potential modal shifts were measured only through occasional surveys based on samples that never exceed 1000 respondents. Although thus obtained data is limited, it nonetheless indicates that among passengers that began to use PT only after the implementation of the fare-free system, 50% previously used private cars or motorcycles, 20% walked, and 10% cycled (CAPAE, 2012a)—which partly denies a frequent accusation from sustainable transport experts that FFPT primarily attracts cyclists and pedestrians. Among car-drivers who did not travel by PT prior to fare abolition, 20% became PT users precisely thanks to FFPT. Nonetheless, as 61% of them continued to use the cars (Transdev, 2013), it “remains a privileged mode of transport” (*Ibid.*, 2013, p. 11), and only a small shift from cars to PT has been observed.

In opposition to further doubts raised by the sustainable perspectives on transport, the quality of collective transport in Aubagne significantly increased not just *despite*, but precisely *because* of fare abolition, which allowed to build strong support for further development of collective transport. In turn, CAPAE authorities had a stronger mandate for renewing the bus fleet, re-designing routes to cover the whole territory of the agglomeration, significantly increasing their frequencies to satisfy the increased demand, and—last but not least—building the network’s first tram line.

In Tallinn, officials at the municipal transport department<sup>18</sup> also report an increase of passenger volumes due to fare abolition (+6,5%, from 133,923m in 2012 to 142,675m in 2013), while Cats et al. (2017) refer to a +14% increase of number of trips performed by PT in the same time period. This growth did not continue in the following years (2014: -0,2%; 2015: +0,7%)<sup>19</sup>, which suggests that it was strongly related to the implementation of FFPT, even if this increase has to be placed in the context of two decades of decline in PT usage. An even higher growth of passenger numbers was observed on board of trains. After they were incorporated in Tallinn’s FFPT system in October 2013, the number of passengers who began and ended their journey within the city borders, effectively using local trains as means of urban transport, increased by +944,9% from 160.000 in 2012 (averaging 450 trips per day) to 1.671.834 in 2014 (4580 trips per day). As a result, FFPT facilitated the emergence and increased the popularity of a previously underused mode of urban rail.

The increase of passenger volumes translated to a higher modal share of PT. As shown in Figure 4 below, one year before fare abolition the share of PT usage amounted to 55%, followed by cars (31%), walking (12%) and cycling (1%). One year after the fares were abolished, the modal share of PT increased by 8%. Free access to PT attracted some car users (+3% increase of modal share), yet the modal shift from walking was slightly larger (+5%). This observation is further confirmed by an earlier study (Cats et al., 2014)—somewhat less reliable due to limited methodology and shorter timeframe—according to which the average trip length by PT decreased by -11,8%, from 2,72 km to 2,40 km. Overall, this data nuances the critiques made by local

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<sup>18</sup> Semi-structured interview with an official at Tallinn’s municipal transport department.

<sup>19</sup> *Ibid.*

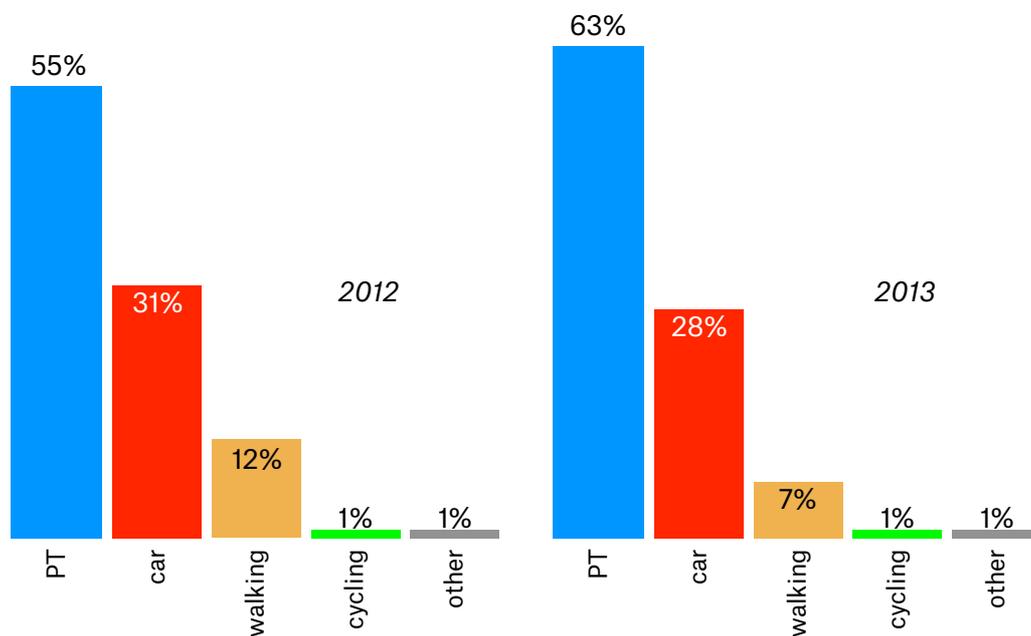


Figure 4. Change of modal split in Tallinn (2012-2013). Source: Cats et al. (2017).

sustainable transport experts, who claim that the contribution of FFPT to sustainable mobility is minimal,<sup>20</sup> and shows while FFPT may indeed attract pedestrians, in nonetheless generates a modal shift from cars to PT.

Moreover, Tallinn’s FFPT programme has been criticised for increasing the levels of mobility. First, as indicated above, even though the average PT trip length has decreased, the passenger volumes have gone up significantly. Second, the share of respondents to the municipal survey who declared themselves as primarily staying at home and not performing any trips decreased from 18% to 13%. Therefore, as FFPT appears to have induced “a trip generation rather than substitution effect” (2017, p. 1096), the local transport market has become significantly larger. Yet, while this may suggest that FFPT has a somewhat limited capacity to contribute to environmental sustainability, this argument should be placed in the political and social context, as it is further discussed in in Section 4.2. below.

<sup>20</sup> Semi-structured interviews with several local transport researchers in Tallinn.

What further complicates the sustainable critique of Tallinn’s fare-free programmes is the fact that its introduction coincided with and built on consistent improvement of PT quality in Tallinn, as discussed in Section 2 above. Abolishing fares may therefore be understood “as the final stage in a sequence of steps aimed at making PT in Tallinn more attractive and affordable” (Cats et al., 2017, p. 1092). The municipal officials claim that many of these steps could not have been taken without fare abolition: “[thanks to



*Figure 5.* The quality of PT service has increased not only despite but also because of FFPT, as demonstrated by the renewal of tramway stock in Tallinn (above) and development of Aubagne’s first tramline (below). Source: transira.ro (above) and author (below).

FFPT,] Tallinn has earned [...] a substantial addition of funds to invest in [PT]. Otherwise [it would] definitely not be at the same level.”<sup>21</sup> For FFPT may well have acted as a path-breaking event that promoted PT among its potential users, and helped to reset the agenda by putting collective transport in the centre of the debate about Tallinn’s mobility (see *Figure 5* below). The increased importance of PT is also visible in the share of its budget in total municipal expenditures, which increased from 9,41% in 2012 (€51,2m out of €544m) to 9,9% in 2016 (€62,9m out of €635m)<sup>22</sup>. In this sense, as in Aubagne, FFPT can be interpreted as a policy that enables (rather than impedes) continuous development of PT services, as gives legitimacy to renew vehicles, increase their frequency and capacity, add new routes, and facilitate and promote new PT modes—which is largely in tune with the main tenets of the sustainable mobility paradigm.

The introduction of partial FFPT between Chengdu’s second and third road from 11<sup>th</sup> October 2012 to 30<sup>th</sup> June 2013 meant a significant increase (+7,75%) of the capacity of the local bus network (Tao, 2013). The impact of the suspension of fares on modal split was observed together with that of traffic restrictions based on license plate numbers<sup>23</sup> that accompanied the FFPT: these measures jointly produced a significant shift from car to PT, as passengers from 68,5% percent of restricted vehicles switched to buses on the day when their car could not be legally driven. Although similar calculations have not been made in relation to free rides provided before the morning peak and on board of community buses, officials claim that “it has achieved only limited results”<sup>24</sup> in this regard. Indeed, FFPT was never expected to curb car-based mobility, which—characteristically of large-scale urban areas across China—is rising sharply. The number of private registered vehicles doubled from 2 to 4 million just between 2014 and 2016 and large-scale car infrastructure continues to be developed as “per capita road area

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<sup>21</sup> Semi-structured interview with an official at Tallinn City Office.

<sup>22</sup> Semi-structured interview with an official at Tallinn’s municipal transport department.

<sup>23</sup> Restrictions were imposed from Monday to Friday. Cars with license plate numbers ending with 1 and 6 were banned from circulating on Mondays, 2 and 7 on Tuesdays, etc.

<sup>24</sup> Semi-structured interview with a member of the board of Chengdu's public bus operator (Chengdu Bus Group).

has doubled” between 2001 and 2011 (Qin, 2015, p. 24). As a result, PT continues to be seen, “to put it frankly, as poor people’s transport” (Miller, 2012, p. 115). Nonetheless, the implementation of partial FFPT was accompanied with an increase of PT quality. As demonstrated by Jing & Van de Ven (2014), in the years preceding fare abolition, the bus network had been transformed from a system operated by competing bus operators (both private and public) into a unified system run by one public company. This allowed to optimise and integrate bus services as well as fares, upgrade the bus fleet, increase its punctuality and frequency, improve the drivers’ working conditions, and thereby reduce the number of bus accidents. Furthermore, electronic tickets were implemented to improve data collection and enable passengers to transfer for free (up to two times) on a single fare. The policy of partial fare abolition in Chengdu resulted from and added to the municipality’s long-term commitment to developing of the city’s collective transport.

### **3.3. Addressing two misconceptions about FFPT**

The analysis of three actually existing cases of fare abolition nuances the two major accusations against FFPT coming from the proponents of the sustainable mobility paradigm.

First, in neither of the three cases has the abolition of fares proven to be financially harmful. Instead, implementing FFPT has helped to generate new revenue that largely covers the reduced or eliminated income from fares. This has been achieved by providing free tickets to residents (Tallinn), raising local taxes (Aubagne) or generating operational savings (Chengdu)—each of these instruments being closely related to FFPT, and impossible to have been developed and applied without it. In each of three programmes analysed, the revenue from FFPT is stable and is generated on a regular (annual) rather than singular basis.

Second, in all of three cases FFPT has at least partially contributed to sustainable mobility. Its impact on the increase of PT usage is unequivocal, and its relatively smaller increase in Chengdu can be explained by the partial form of fare abolition. In each of the programmes a small modal shift from

private cars to PT has been observed, although only in Tallinn it can be demonstrated using relatively reliable and precise figures. However, it is evident that FFPT also contributes to a shift from walking to PT, and results in increase of overall mobility levels. Finally, contrary to critiques voiced by advocates of sustainable transport, the implementation of FFPT not only has not impeded, but has actually contributed to existing efforts towards increasing the quality of PT service. The choice between high quality and zeroed fares thus does not appear accurately formulated.

#### **4. Analysis: towards critical perspectives on FFPT**

The concerns that sustainable transport scholars formulate with regard to FFPT are problematic not only because they are not confirmed by empirical evidence from actually existing cases of fare abolition. As the sustainable perspectives limit their view to mobility-related questions, they focus on assessing the potential of fare abolition to act as a sustainable transport policy. Consequently, they draw conclusions on an empirical base that is too narrowly defined, and does not allow to fully observe the ambition and impact of FFPT that may lie elsewhere. This is the ambition of the remainder of the paper: to expand the perspective on the policy of fare abolition by embracing it as an essentially *urban* phenomenon rather than one limited to the questions related to *transport* alone. I therefore propose to place the analysis of FFPT in the context of metropolitan and territorial governance, applying what has been identified as “critical” perspectives on transport policy (Kębłowski & Bassens, 2017).

This analysis reveals the capacity of FFPT in terms of challenging essentially neoliberal transport agendas by emphasising an inherently social dimension of collective transport (in Tallinn). Second, it demonstrates the role of FFPT as a holistic and solidarity-driven territorial strategy (in Aubagne). Finally, FFPT is discussed as a policy that can advocate an “urban utopia” (in Chengdu).

#### **4.1. Aubagne: FFPT as territorial policy of inter-municipal solidarity**

As in Tallinn, the transition of Aubagne's PT system to a fare-free regime appears to be only partly underpinned by the ambition to affect local mobility patterns. Rather, one of its main goals is to facilitate a solidarity-driven territorial strategy, which unambiguously opposes the political agenda of CAPAE's powerful neighbour, the municipality of Marseille, who have followed overtly neoliberal principles of urban entrepreneurialism. Openly partaking in inter-territorial competition for external capital with municipalities across France and the Mediterranean (Bergsli, 2008; Fournier & Mazzella, 2004), Marseille engages in highly speculative, socially exclusive and spatially limited programmes. In transport, this approach has meant combining mobility infrastructure investment within real-estate speculation programmes and pro-gentrification policies, particularly visible in urban neighbourhoods adjacent to the city's waterfront. While the local authorities have emphasised the importance of improving the PT quality, and hence have justified the necessity of maintaining its paid character—the domination of cars in the city is evident and largely unquestioned. Furthermore, offering highly-priced PT service does not appear to work towards tackling the socio-spatial exclusion of a large part of Marseille's population, in particular those residing in the city's infamous *banlieus*.

In clear contrast with Marseille's competition-driven approach to urban policy, FFPT can be understood as an expression of inter-municipal solidarity. Until the 2014 elections, which brought a historic shift from the left-wing to right-wing majority, the agglomeration was referred to as a "co-operative" of municipalities, rather than a formal administrative unit. It gathers 12 municipalities that are largely unequal in terms of their size and level of political influence, as nearly half of CAPAE's population resides in Aubagne. Rather than reflect this inequality, CAPAE's transport policy addresses it. Already in the years preceding fare abolition, the local PT network was redesigned to provide on-demand PT service to the most remote areas of the agglomeration, while several of its municipalities became connected with Aubagne by express bus services (Claux, 2014, p. 230-37). According to local officials, one of the key objectives behind FFPT was to further strengthen this approach by providing quality access to PT across the CAPAE territory with, and to facilitate links among its municipalities. In this sense, FFPT "was not only

Aubagne, it was about the whole territory of CAPAE”<sup>25</sup>. The FFPT-led integration has an inherently social dimension. As opposed to the situation in Marseille, where many of the youth are isolated in their neighbourhoods due to high PT prices, “here, a lot of young people discovered different villages within the agglomeration”<sup>26</sup>. As expressed by one of the authors of the local FFPT programme, it “acts as a glue that keeps our society and our territory together”<sup>27</sup>, building links across the territory, and preventing “the emergence of enclaves”<sup>28</sup>. Furthermore, rather than conceptualise PT transport as a market commodity that has to be offered at a competitive price, CAPAE authorities strongly emphasise the public character of collective transport as a freely and commonly accessible element of social welfare.

The decision to abolish fares thus allowed CAPAE to emphasise its political identity. Rather than mimic Marseille’s entrepreneurial attitude, FFPT allowed the agglomeration to emphasise its commitment to “develop[ing] an original policy” (Claux, 2014, p. 243), and to engage in a completely different urban project”<sup>29</sup>. In this sense, FFPT has been discussed by local officials as an expression of a radically different philosophy behind urban development. This statement became particularly timely once CAPAE faced the risk of “forced integration” (CAPAE, 2012, p. 4) within the Metropolis of Aix-Marseille-Provence (Métropole d’Aix-Marseille-Provence, MAMP)—an institution established on January 2016 to effectively take over CAPAE’s executive powers, and dominated by Marseille representatives. As entrepreneurial attitudes underpin transport agendas outside the former agglomeration’s borders, FFPT “free public transport allows [it] to identify the importance of respect for a diversity of available political choices”<sup>30</sup> within the newly-established metropolitan area.

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<sup>25</sup> Semi-structured interview with a mayor of one of CAPAE municipalities.

<sup>26</sup> Semi-structured interview with a former member of the Council of CAPAE.

<sup>27</sup> *Ibid.*

<sup>28</sup> *Ibid.*

<sup>29</sup> *Ibid.*

<sup>30</sup> *Ibid.*

## 4.2. Tallinn: FFPT as a municipal social policy

As soon as the Tallinn officials stated their intention to abolish fares in the local PT network, FFPT attracted sharp criticism from the national authorities. Estonia's prime minister expressed his concern that fare abolition "does not stimulate a healthy lifestyle" (err.ee, 2013b) as it is likely to attract mainly pedestrians, and the country's president felt obliged to give "a recommendation to the voter: [...] when you are told that something is free [...] in reality it [...] comes on account of something else" (err.ee, 2013a).

Their disagreement with the idea of abolishing fares is characteristic of a fundamental ideological cleavage—reflected by FFPT—between the institutions of Estonian State and the municipality of Tallinn. From 1999 to 2016, the former was governed by right-wing parties advancing neoliberal, pro-market and pro-austerity policies. In the field of transport, this meant imposing no car tax on the national level and privatising inter-city bus services. The latter, home nearly one third of Estonia's population, producing over half of the country's GDP, since 2001 has been ruled nearly uninterruptedly by a left-leaning majority. Its agenda includes a number of social policies, including setting up a municipal bank offering low-rate loans, alleviation of land tax for Tallinn residents, and the much-advertised "Tallinn helps" campaign in which cash payments were offered to retired citizens on their birthday, and free potatoes and firewood were distributed—actions regularly criticised, and even mocked by members of the national administration<sup>31</sup>.

FFPT could be interpreted as an element of Tallinn's municipal social agenda, which, applied to the field of transport, implicitly challenges the neoliberal policies of the Estonian state. Rather than being as customers for whom providers of different transport modes need to compete, within the FFPT system all Tallinn residents are equal in free access to collective transport. As a result, the abolition of fares has resulted in more frequent usage of PT among a number of socio-economic groups that could be considered as vulnerable, excluded, or poor (*Figure 6* below). As shown by data from annual municipal survey (analysed by Cats et al., 2017), within one year after the introduction of free fares, PT usage has increased among the unemployed (+32%), the low-income groups (+26% among residents whose income is

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<sup>31</sup> Semi-structured interview with an official at Estonia's Estonia's Ministry of Economic Affairs and Communications.

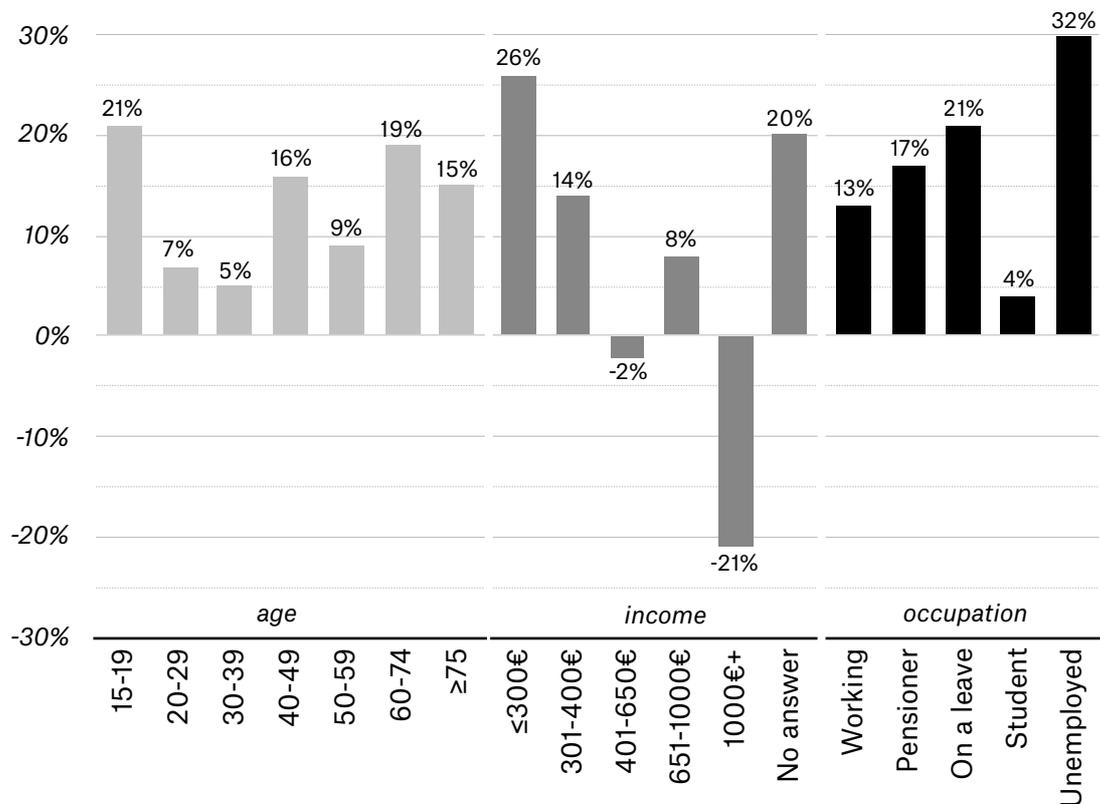


Figure 6. Change of declared usage of PT in Tallinn between 2012 and 2013 per age, income and occupation. Source: Tallinn municipality survey analysed by Cats et al. (2017)

lower than 300€/month, and +14% among those with a 300-400€/month income), as well as among Tallinners on a parental or home leave (+21%), and pensioners (+17%). Providing free access to PT boosted its popularity across the age groups, in particular among the youth (+21% among 15-19-year-olds), the middle-aged (+16% among 40-49-year-olds) and the elderly (+19% among residents between 60 and 74 years old). FFPT thus delivers on the promise of providing a more inclusive mobility paradigm for the poor, opening up the PT—and, by extension, the city—to a plurality of less-privileged groups. This observation provides strong arguments vis-à-vis the sustainable critique of FFPT. While fare abolition has made a limited impact in terms of generating a modal shift from cars to PT, and leads to a visible increase of overall levels of mobility, this increase occurred not among the richest—and, by extension, probably the highly-mobile—users, but among

the poorest, least privileged, and likely the least mobile ones. Thus, FFPT does not focus primarily on curbing car-based mobility—a challenge that could perhaps be better addressed head-on by limiting the capacity of road and parking infrastructure—and instead its chief ambition is to function as a social policy, increasing access to mobility across social strata.

This outcome is particularly salient in the context of the ethnic dynamics in Estonia. Across the country the blue-collar workers, low-income and unemployed are particularly strongly represented among ethnic Russian population (Tammaru & Kontuly, 2011). This ethnic group is highly concentrated in Tallinn: according to the 2011 census, 36,8% of Tallinn’s residents were ethnic Russians, of whom as many as 43,2% did not hold Estonian citizenship<sup>32</sup>, being excluded from national elections, while retaining the right to vote in in local elections. Therefore, FFPT can be further interpreted as a welfare programme that responds to the political exclusion of ethnic minorities on the one hand, and a way of improving their integration by providing them with better access to mobility.

### **4.3. Chengdu: FFPT as a sign of an urban utopia**

As in Aubagne, Chengdu’s policy of partial fare abolition, and in particular the practice of providing of free rides on board of community buses, is much more than just a planning instrument helping to optimise the local bus network. Instead, it can be interpreted as an expression of political experimentation, a result of local authorities’ search for political alternatives, and an element of a long-term, broad strategy for making Chengdu a more open and inclusive city.

Chengdu’s FFPT—albeit implemented only partially, and on a limited scale—implicitly challenges some of the deeply embedded and systemic principles of Chinese urbanisation. As identified by Campanella (2008), ever since China began to open to global capitalism in the 1970s and 1980s, its urban development has proceeded at scale and spectacular speed, generating massive sprawl, and involving extreme intra-urban segregation. Since “perhaps no other regime has equated national social and political development

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<sup>32</sup> Source: Statistics Estonia database (<http://pub.stat.ee>). As many as 10,6% Tallinn residents do not have any citizenship, and instead hold a “grey” status.

with urbanization so explicitly and determinedly as China's" (Abramson, 2016, p. 156), the resultant urban growth has occurred at a record-breaking scale and extraordinary pace. Put simply, "in China, rapid urbanization is both a result and a driving force of the fast developing economy" (Chen & Gao, 2011, p. 500). The spectacular dimension of this development is symbolised by local officials' drive to erect large-scale urban infrastructure. As a result, "there is hardly any category of building type, infrastructure, or amenity that China has not built in its largest incarnation" (Campanella, 2008, p. 285). With regard to transport, China boasts *inter alia* the "world's most extensive national highway network [...], highest rail line [...], the world's longest, largest bus, [... and] the biggest airport terminal" (*Ibid.*). This urban growth induces continuous urban sprawl: administrative boundaries of cities are expanded, and rural land is re-zoned as urban. However, to profit from thus generated massive rent gap, urban authorities need to attract real estate investors to whom the newly converted urban land can be leased. This requires providing a number of adequate services and amenities, among which transport infrastructure is fundamental. Consequently, transport constitutes a powerful asset for urban authorities, who continue to extend the metro system towards the city's administrative limits.

Finally, the extremely dynamic development of Chinese cities relies on massive migration from rural to urban areas, and involves strict segregation and exploitation of rural migrants. Their disenfranchisement derives from a strict distinction between rural and urban citizens defined by the household registration system called *hukou*. Introduced in 1958, it strictly limits access to urban welfare. As the majority of rural migrants flocking to Chinese cities have very little chance in securing an urban *hukou*, the system has been blamed for maintaining an "urban-rural apartheid" (Miller, 2012, p. 176), and identified as "a major source of injustice and inequality, perhaps the most crucial foundation of China's social and spatial stratification" (Wing Chan & Buckingham, 2008, p. 583).

The policy of providing access to free rides on board of Chengdu's community buses stands out as a measure that does not follow the principles identified above. Chengdu's partial FFPT has developed slowly and gradually, and at a slow pace, as new bus routes are occasionally added to the paid system. Even though it can be found throughout the city's "urban core", FFPT functions on the scale of particular neighbourhoods, as community

buses are intended to provide short-distance mobility options, and are operated using small vehicles. Community buses have a very mundane character, lack any spectacular elements, and do not stand out from a plethora of buses circulating on Chengdu's roads. FFPT is also a very inexpensive policy that does not entail significant infrastructural investment. Furthermore, providing free access to a part of the bus network is not motivated by the ambition to contribute to the city's land valorisation strategies. Rather than to expand the network of collective transport to open new opportunities for real estate speculation, the goal of partial FFPT is to improve intra-neighbourhood connectivity, fill gaps in the large-scale PT system, and make it more operational and flexible at its fringes. Finally, and crucially, free rides are available to all users, regardless of their *hukou* status, embracing inhabitants who do not hold urban residency, which currently amount to approximately one fourth of Chengdu's total population<sup>33</sup>. While they do not have access to healthcare, education and housing benefits provided by the municipality, their usage of public transport is not conditioned by personal status. The apparent ambition of FFPT is therefore to focus on the question of social equality, inclusion and justice, and to "provide welfare to the public"<sup>34</sup>—whether they are registered in Chengdu or not.

Thus, FFPT implicitly challenges the main features of urban development in China, as a policy developed in a slow pace, on a small scale, in a largely un-spectacular manner, without contributing to urban sprawl, and by tackling social segregation rather than exacerbating it. In this sense, it may be argued that FFPT challenges the paradigm of Chinese urban development, and could signal a long-term intention to negotiate the stark segregation between urban and rural residents. Therefore, partial fare abolition in Chengdu shows a visible alternative to existing practices of urban development, implicitly questions the power relations that shape local urban agendas, and in this sense highlights an urban utopia, and an alternative urban future.

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<sup>33</sup> Semi-structured interview with a transport researcher at Chengdu Academy of Social Sciences

<sup>34</sup> Semi-structured interview with a member of the board of Chengdu's public bus operator (Chengdu Bus Group).

## 5. Conclusions

The practice of abolishing fares in PT networks is bound to raise a series of questions about the financial and mobility-related context of this policy. These questions have been frequently formulated with regard to FFPT by the proponents of conceptualising transport as contributor to sustainable development, and a harbinger of a transition towards the “sustainable mobility paradigm” (Banister, 2008; Banister & Hickman, 2013; Inderwildi & King, 2012; Low & Gleeson, 2003). Their main concerns about fare abolition relate to the observation that cutting revenue from tickets may destabilise PT operators, and offering free rides does not really attract car drivers, but rather pedestrians and cyclists.

However, the empirical evidence from FFPT programmes in Aubagne, Tallinn and Chengdu at least partly dispels these doubts, and brings nuance to the debate. First, it proves that zeroing fares can, quite paradoxically, lead to raising of additional revenue by PT companies and local authorities. This can be achieved by co-financing FFPT by public institutions and private businesses (in Aubagne), or offering it as an amenity accessible to residents of a particular locality (in Tallinn). Second, the paper demonstrates that fare abolition does not necessarily mean a decrease of quality of PT services. To the contrary, it supports efforts towards modernising PT networks, not least by highlighting the importance of collective transport in public debates, building momentum for its further development. Nonetheless, the experience of Tallinn proves that FFPT can induce only a modest modal shift from cars to PT, and contributes to an increase of overall mobility levels and generation of new trips, rather than allowing for their substitution. This observation is further confirmed by the evidence from Aubagne and Chengdu, which shows that FFPT has the capacity to contribute to sustainable mobility, although it should not be taken for granted.

However, the analytical questions formulated by the sustainable mobility paradigm with regard to FFPT, and the empirical evidence to which these questions may lead are limited. By focusing on how fare abolition can be funded, and what impact it has on mobility patterns, sustainable perspectives on transport omit the wider urban context for FFPT. In all three cases of fare abolition this context does not simply provide a background for the policy, but actually holds the key to its understanding. Therefore, it is by posing critical

questions that reach beyond traffic and movement that one can reveal how fare abolition is implemented as a social policy challenging neoliberal agendas in transport (Tallinn), a strategy acting towards inter-territorial solidarity (Aubagne), or even an instrument that functions as an alternative to the local paradigm of urban development (Chengdu). Assuming a critical perspective on a transport policy such as FFPT thus allows to explore how an apparently simple policy idea may produce very different practices that are strongly embedded in local social and political contexts. It demonstrates that the *raison d'être* of policies that apparently belong to the field of transport, may be more strongly related to their urban rather than transport dimension.

## Acknowledgments

I would like to thank She Chen and Ming Zhuang for their invaluable support during my fieldwork in Chengdu, as without their generous help this article could have never been written. I am also particularly grateful to David Bassens, Mathieu Van Crieking and Frédéric Dobruszkes for many inspiring comments and conversations around the numerous draft versions this paper. Needless to say, none of the them bears any responsibility for the arguments presented here, which remain my own.

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## CHAPTER 5: WHAT THE SUSTAINABLE MOBILITY PARADIGM DOES NOT SEE

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## Chapter 6

# **Participation and power in fare-free public transport in Aubagne and Tallinn: an urban regime perspective**

# Participation and power in fare-free public transport in Aubagne and Tallinn: an urban regime perspective

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This chapter is being prepared for submission to *Urban Studies*.

## Abstract

As transport research appears dominated by technical and a-political considerations, the ambition of the paper is to contribute to a re-politicisation of this field. It therefore focuses on the question of power relations by which transport policies are undergirded, and analyses their potential to empower their users and workers. To inquire into these issues, the paper looks at the policy of fare-free public transport (FFPT) implemented in Aubagne (France) and Tallinn (Estonia), and analyses the questions of participation and power in FFPT through the lens of urban regime. While this approach is well-established in urban studies, transport scholarship has not yet embraced it. Urban regime theory acts here as a proxy for understanding the process of conceiving and developing transport policies, and in turn highlights transport as an entry point for investigating coalitions of urban elites. The empirical analysis reveals that the implementation of FFPT programmes may hinge on cross-institutional, top-down arrangements, which cement rather than open up existing coalitions of local stakeholders. Albeit FFPT has the capacity to empower public transport passengers, it can be incorporated in strategies oriented towards eroding labour conditions of its workers. Even though abolishing fares has a more political than technical dimension, in neither Aubagne nor Tallinn has it profoundly challenged or changed the local power relations. These findings demonstrate that studying the process of decision-making about whether, when, where, and for whom to implement a given transport instrument is key to understanding its outcome.

## Keywords

urban regime, elite coalitions, urban transport, fare-free public transport, labour, citizen participation

## 1. Introduction

Re-politicising transport studies is a challenge that has been taken up by a growing number of transport scholars (Addie, 2013; Baeten, 2000; Enright, 2013; Fol, Dupuy, & Coutard, 2007; Gössling & Cohen, 2014; Henderson, 2006; Marsden & May, 2006; Reigner, Brenac, & Hernandez, 2013). What these contributions have in common is the recognition that the question of power relations by which transport policies are undergirded, and which they may effectively affect and alter, requires a more detailed and systematic scrutiny. These endeavours form part of an emergent—albeit still very fragmented—field of “critical” urban transport studies, which explicitly focuses on regulatory frameworks and socio-political relations structuring the relationship between transport and the city (Cidell & Prytherch, 2015; Kębłowski & Bassens, 2017; Schwanen, 2016, 2017; Shaw & Sidaway, 2011). Therefore, critical perspectives not only aim to deepen the understanding of transport, but also to utilise it as a vehicle for exploring and changing urban politics. This involves assessing the potential of urban transport policies to empower urban inhabitants in terms of participating in a fundamental re-configuration of power relations, away from state and market institutions.

I propose to investigate questions concerning participation and power in urban transport by referring to the theory of urban regime. This path-breaking notion, first formulated by Stephen Elkin (1985, 1987) and Clarence Stone (1989), suggests that participation in policy making resides within coalitions of elites that embrace a variety of actors. Their power hinges on the capacity to continuously work across their positions towards building and securing a consensus around specific policy goals and solutions.

While urban regime theory is well-established in urban geography and urban studies, rare are examples of its application to study transport policies (Pflieger, Kaufmann, Pattaroni, & Jemelin, 2009). However, there exists strong evidence suggesting that processes identified by Stone underpin the way in which transport agendas are framed and subsequently translated into infrastructural projects. Building coalitions among local elites appears to be essential for the planning of metropolitan transport networks (Enright, 2016), implementation of transport instruments such as bus rapid transit (Wood, 2014), construction of underground rail and metro infrastructure (Zitouni & Tellier, 2013), development of bicycle-friendly planning (Médard de

Chardon, 2016), and many other instances of allegedly “rational” and technical, “sustainable” and “smart” mobility solutions (Reigner et al., 2013). At the same time, the process of consolidating and enacting the power to make urban transport policy seems to exclude the “non-expert” local population and transport workers, who tend to be approached as passengers and clients of particular mobility modes and solutions, rather than citizens and political agents.

Throughout the paper I hope to demonstrate that urban regime is a useful proxy for understanding the process of conceiving, developing and implementing transport policies, revealing how they may enter and alter local power relations. Consequently, urban regime theory may constitute a significant contribution to the re-politicisation of urban transport scholarship. At the same time, I intend to show the relevance of studying transport—in spite of its apparently technical and de-politicised character—as an entry point for investigating urban regimes. In doing so, I argue that paying attention to the process of making a decision about whether, when, where, and for whom to implement a given transport instrument is key—albeit not in any deterministic way—to the understanding of its anticipated and actual outcome.

Having discussed Stone’s theory and its recent interpretations in the following Section 2, the remainder of the paper applies this framework to analyse the conception and implementation of fare-free public transport (FFPT) programmes. The policy of abolishing fares is as straightforward as it is controversial (Kębłowski, 2017), criticised by transport scholars and practitioners (Cats, Susilo, & Reimal, 2017; Fearnley, 2013; Storchmann, 2003), and praised by critical scholars and activists (Cosse, 2010; Dellheim & Prince, 2017; Schein, 2011). My analysis focuses on FFPT programmes in Aubagne (France) and Tallinn (Estonia) as two salient cases of fare abolition, implemented on 15th May 2009 and 1st January 2013 respectively. While Aubagne is an important node in the French network of fare-free towns, Tallinn is the largest existing FFPT programme, and the self-declared world’s “capital of free public transport” (Savisaar, 2013). Although, as discussed in Section 3, important contextual differences separate the two cases—Aubagne is a periphery of the city of Marseille, while Tallinn is the urban centre and capital of Estonia—their fare-free policies are similar in their alleged attempt to provide unconditional “mobility to all,” and to challenge existing transport strategies (Giovanangelli & Sagot-Duvauroux, 2012). Yet, in both cities im-

portant questions remain concerning the alignment of interests that initiated and undergirded the process of conceiving FFPT, whether and how this process effectively challenged the predominantly top-down ways of local policy-making. These issues are addressed in Sections 4 and 5, which respectively centre upon the question of who participated in the conceptualisation of FFPT, and how its implementation affected the power relations undergirding local transport agendas.

## 2. Urban regime theory: framework and methodology

The concept of urban regime emerged from the “community power debate” that throughout the 1950s and 60s engaged elitist and pluralist approaches in discussing the question of *who* governs the city (Dahl, 1961; Hunter, 1953). Seminal work by Elkin (1985, 1987) and Stone (1989, 1993) challenged this inquiry by shifting it towards the question of *how* power is created, assembled and enacted. In his study of the city of Atlanta (US), Stone thus argued that power is not simply obtained and controlled, for instance by winning an open election or holding a public office. Electoral patterns and outcomes are limited in terms of explaining the actual urban power structures and agendas. Instead, power is relational, produced and sustained among a variety of governmental (elected) and non-governmental (unelected) urban actors, whose capacity to govern is something that is being constantly achieved and reaffirmed. This capacity constitutes the power *to* develop and execute policy rather than the power *over* particular institutions or territories. In turn, power can be detected by studying urban regimes, which Stone defines as “informal arrangements by which public bodies and private interests function together in order to be able to make and carry out governing decisions” (1989, p. 6). These “growth coalitions” (Molotch, 1976) built around common political motivations and interests continuously produce and reaffirm the power *to* make urban policy. This is achieved through interaction and cooperation, coalition building around congruent interests, pre-emption of governance agendas, mobilisation of various resources (e.g. financial, regulatory and symbolic), conflict resolution, and adaptation to ever-changing circumstances.

Urban regime theory is as influential as it is controversial. One of its main critiques regards its alleged failure to sufficiently analyse and explain the process of regime formation (Mossberger & Stoker, 2001). Doubts have been raised concerning the extent to which the concept can be applied outside the US (Davies, 2003; DiGaetano & Klemanski, 1993; Ward, 1996), and what capacity it has to explain power structures in contemporary post-modern and post-industrial cities that are increasingly globalised and heterogeneous (Pierre, 2014). The popularity of the concept has nonetheless led several urban scholars to draw its boundaries and core properties, as well as to discuss its typologies (Kantor, Savitch, & Haddock, 1997), while warning against parochialisation and misclassification of the concept by using it to describe just any relationship between public and private interests and institutions (Mossberger & Stoker, 2001). Therefore, rather than expecting to find elite coalitions structuring an urban regime in every city at any time, one actually has to empirically detect and demonstrate it (*Ibid.*). However, it has also been argued that urban regime theory may function as a more flexible framework. While retaining Stone's initial focus on how power is produced through relations between governmental and non-governmental actors, which in the European context does not necessarily involve private businesses (Stone, 2005; Ward, 1996), Blanco (2015) shows that diverse and opposing regimes can co-exist within one city, and can embrace a specific sector of urban politics (Stone, 1998).

A variety of considerations emerge from the urban regime theory. First, it emphasises the plurality of processes of consolidating and reproducing power, which involve a variety of actors. Second, it highlights the importance of alignment of private and public interests in policy-making, which engages stakeholders that are not limited to elected officials. Finally—a point that is particularly important for the argument made in this paper—it identifies that the power to make policy ultimately resides within coalitions of elites, which in turn raises the question about what kind of interests are represented by policies implemented, and how the process of their conception and development involves and represents non-elite and “non-expert” citizens. It is with this last set of issues identified by the urban regime theory that this paper is concerned.

As argued in the introduction, these questions have rarely been investigated in relation to transport policies. To bridge this gap, this paper refers to

the particular case of the policy of abolishing fares in public transport (PT). Fully implemented in as many as 96 cities and towns worldwide, FFPT appears to be a subject of much controversy (Kębłowski, 2017). On the one hand, it is disregarded by many transport scholars and practitioners as a measure that threatens economic stability and technical rationality of PT networks (Cordier, 2007; Duhamel, 2004; Perone, 2002; Storchmann, 2003; Studenmund & Connor, 1982) and does not constitute an incentive strong enough for car drivers to switch to collective transport (Cats et al., 2017; Cervero, 1990; Fearnley, 2013). On the other hand, however, FFPT is praised by scholars and advocated by activists as a step towards a fundamental social, political and ecological transformation that expands well beyond the field of transport (Brie, 2012; Cosse, 2010; Dellheim & Prince, 2017; Giovanangelli & Sagot-Duvauroux, 2012; Robert, 2015; Schein, 2011). This suggests that FFPT is a consensual instrument, and its potential implementation may require consensus-building across political and intellectual positions.

In the inquiry into two particular cases of FFPT in Aubagne and Tallinn I intend to identify who actually participated in the definition, elaboration and implementation of FFPT, how this process engaged and affected different actors, and to what extent it enabled them to appropriate and produce urban space. As informed by critical studies on citizen participation in urban planning (Huisman, 2014; Krytyka Polityczna, 2012; Leal, 2007; Pearce, 2010; Silver, Scott, & Kazepov, 2010; White, 1996), this involves studying the inclusivity of the process that led to fare abolition, analysing to what degree it allowed for deliberation among top-down and bottom-up actors as well as for articulation of both consensus and conflict. However, in opposition to apparent tendencies in transport studies, participation is not imagined here as a tool for building legitimacy and acceptability for “best solutions” (Epprecht, von Wirth, Stünzi, & Blumer, 2014; Isaksson & Richardson, 2009; Sagaris, 2014). Instead, critical research entails looking at the extent to which the participation of transport passengers and workers in conceptualising and implementing transport agendas, policies, practices and infrastructures contributes to a potential transfer of power over the appropriation and production of urban space. The position of workers and passengers of local PT networks are further analysed—a question seldom investigated by transport studies (Rekhviashvili & Sgibnev, 2017). Finally, an inquiry is made into the potential effect of fare abolition on re-politicising the transport debate and its participants. Consequently, I intend to learn about how power is assembled

to make FFPT actual in some places at a certain moment in history, and whether FFPT has the capacity to reveal and alter configurations of power, for instance by empowering PT workers and passengers—and by extension urban inhabitants. Put simply, I am interested in who participates and what coalitions of interests are (re)present(ed) in the process of conceiving and implementing a transport policy such as FFPT, and what alterations of power does this process involve. Focusing on the political process that eventually resulted in the abolition of fares in Aubagne and Tallinn, I argue that analysing how urban transport policies are developed is as important as scrutinising their final effect. If by providing unconditional access to mobility FFPT may produce more just social and spatial configurations, it is relevant to verify whether it is “just distribution justly arrived at” (Harvey, 1973, p. 98).

To inquire into these issues, I conducted a mixed-method analysis of FFPT programmes in Aubagne and Tallinn. Firstly, to detect official records of FFPT implementation, I analysed the minutes of meetings of political bodies that discussed fare abolition: the municipal councils in Aubagne and Tallinn, and the council of former *Communauté d'agglomération du pays d'Aubagne et de l'Étoile* (Agglomeration community of Pays d'Aubagne et de l'Étoile, CAPAE), in which Aubagne is located. I also studied existing and forthcoming transport and mobility plans. Secondly, I conducted over 70 semi-structured interviews with local stakeholders—key municipal officials from Tallinn, Aubagne and several other municipalities in CAPAE, representatives of regional and national authorities in Tallinn as well as members of CAPAE administration. Board members and workers (drivers and ticket controllers) of PT companies were also interviewed, as were local activists and trade union leaders. In Aubagne, I spoke with participants of workshops and debates organised around fare abolition. Thirdly, I examined local media outlets to obtain additional information about the process in which FFPT was developed in Aubagne and Tallinn.

### 3. Contextualising fare-free programmes in Aubagne and Tallinn

The fare-abolition programmes in Aubagne and Tallinn have been selected as particularly relevant cases for studying the politics of FFPT. Acting as respective FFPT centres in France and Europe, both cities appear to share their commitment to changing the transport paradigm by zeroing fares in collective transport. However—as existing work on FFPT programmes tend to focus on their impact on mobility patterns (Cats et al., 2016; Storchmann, 2003)—it remains unclear how this commitment was forged in the first place, whom it involves, what interests it represents, and ultimately how it affects local power relations shaping transport. Furthermore, little is known about whether and how it affects the position of transport passengers and workers—an issue that seems particularly valid given the rallying call of “mobility to all” to which pro-FFPT policy-makers often refer.

There exist important differences in terms of how FFPT functions in Aubagne and Tallinn. While in Aubagne riding on board of PT is free for all, on no condition, and no tickets are issued, Tallinn’s FFPT is available to officially registered residents who are required to validate their “zero ticket” upon boarding PT. Moreover, Aubagne’s PT network is relatively small and it is composed of 11 regular bus lines, 13 school lines and a single tram line. Tallinn’s PT system, on the other hand, is significantly larger, and consists of 74 routes complemented by a compact tram and trolleybus network (4 routes each).

Furthermore, a series of geographical differences separate Aubagne and Tallinn. Aubagne’s fare-free programme expands to the whole territory of CAPAE, which until 2014 functioned as an agglomeration of 12 municipalities, of which Aubagne is the largest (45,128 inhabitants against 104,018 in the whole CAPAE). The agglomeration constitutes the eastern periphery of adjacent city of Marseille, and in January 2016 it was incorporated in the framework of—then newly established—Métropole d’Aix-Marseille-Provence (Metropolis of Aix-Marseille-Provence, MAMP). Despite ongoing suburbanisation that dates back to the 1960s, CAPAE has retained a strong identity. Unlike the traditionally right-wing neighbouring cities of Marseille and Aix-en-Provence, many of the CAPAE municipalities have been governed by left-wing, including communist mayors. While in the last decade Marseille in-

creasingly engaged in speculation-based urban entrepreneurial policies, Aubagne and its neighbouring municipalities continued to promote socially re-distributive agendas (Bergsli, 2008; Claux, 2014; Fournier & Mazzella, 2004). Until the 2014 elections, which produced right-wing majority, CAPAE called itself a “co-operative” of municipalities, and a hub that wants to “do things differently.” (Claux, 2014, p. 243).

Unlike Aubagne, Tallinn is an important administrative, economic and cultural centre, and the capital of Estonia. It is therefore significantly larger than CAPAE, with the population of 443,623 (2017). Tallinn’s political identity has been shaped not vis-à-vis its adjacent territories, but the Estonian state. Ever since 2005, the municipal institutions including the mayor’s seat have been dominated by the Centre Party, which has engaged in a series of left-leaning social policies, including setting up a municipal bank offering low-rate loans, alleviating land tax for homeowners in Tallinn, and a much-advertised “Tallinn helps” campaign of offering a financial bonus to retired citizens on their birthday, as well as distributing small amounts of free potatoes and firewood. Contrarily, Estonian politics has been strongly influenced by right-wing parties, in particular the Reform Party and the Pro Patria and Res Publica Union, who have advanced neoliberal and pro-austerity programmes.

#### **4. Participating in FFPT: “we discussed it only among ourselves”, “we were not on the same level”**

At the time of conceiving and implementing FFPT, both CAPAE’s and Tallinn’s local governments were relatively independent in terms of shaping and executing urban transport policies. In the case of CAPAE, until January 2016 it was its council that held major responsibility for transport policy and planning. Gathering delegates from 12 municipalities, the council elected its President who controlled the inter-municipal administration, including local PT authorities. This means that CAPAE was largely free in terms of developing and executing its own transport agenda—regardless of opposing views among departmental authorities, or in the neighbouring Marseille. However,

any consensus regarding significant investment in PT had to embrace a number of private stakeholders. First, support had to be secured from local businesses: according to the French law, CAPAE municipalities can levy a transport tax called *versement transport*, collected from companies of more than 11 employees, represented by the local chamber of commerce. Second, key transport-related decisions had to involve the PT operator, a local branch of the trans-national company Veolia.

In Tallinn, key decision-making power over transport priorities belongs to the mayor. While formally chosen by the council, the mayor and the mayoral deputies directly manages the municipal administration, including urban planning and transport authorities. Importantly, as one of Estonian municipalities, Tallinn has the right to collect 11,6% of each of its resident's taxable income, guaranteeing relative economic and political autonomy from the national authorities. As an official of the Tallinn municipality admits:

“One of the main factors that enabled [fare]-free public transport in the first place was the fact that Tallinn did not and still does not receive a state subsidy for public transport from the national level. [...] Otherwise, we would have been stopped [because of] providing a service [...] for Tallinn residents only [...] As public transport was not subsidised, we had the freedom to decide [to abolish fares]. And this is not just a hypothesis. In [2012 and] 2013 other municipalities in Estonia considered to move towards [fare]-free public transport, for example Haapsalu. But then the Ministry of [Economic Affairs and Communications] that is in charge of public transport subsidies said that if one even dares to think of [FFPT], the subsidy would be immediately stopped.”<sup>1</sup>

In Aubagne, the first mention of FFPT dates back to the municipal elections in March 2008. In the weeks preceding the vote, the so-called “rainbow” coalition that gathered communists, socialists, greens and representatives of civil society discussed and forged behind closed doors the idea to abolish fares in the local PT network. Having conceptualised the form of the future fare abolition programme—free access to PT would be unconditionally provided to all users, and an increase of *versement transport* would cover the lost revenue from fares—the coalition announced its commitment to implement FFPT in the week separating the two electoral rounds (held on 9th and 16th March 2008 respectively). The switch to a fare-free network was ex-

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<sup>1</sup> Semi-structured interview with an official at Tallinn City Office.

plained to the public as a measure providing a more equal access transport, and increasing the purchasing power of the local population, in particular the poor, youth and elderly. Besides these reasons, the key motivation of the “rainbow” coalition resided in the “powerful and symbolic dimension of FFPT”<sup>2</sup>—it was an electoral promise that surprised both the voters and right-wing opposition, and quickly became the “battle call [that] made people dream.”<sup>3</sup>

Following the election, a wider consensus around fare abolition began to materialize, involving the usual decision-makers. The mayor of Aubagne effectively and promptly convinced the mayors of other CAPAE municipalities that FFPT was not only financially and technically feasible, but also beneficial for their communities. Key to the alignment of the pro-FFPT interests was support from local business. Local CEOs agreed to the increase of taxation, on the condition that it would be balanced by better provision of PT to their employees, making the work commute more cost-efficient and relaxing: “It was a kind of give-and-take agreement. They were ready to contribute more to *versement transport* [...] knowing that in return they would receive a service for their employees”<sup>4</sup>. Veolia, the local PT operator, was immediately on board as it hoped that FFPT would strengthen its relationship with the local administration, even if abolishing fares meant several operational and security-related challenges. An ex-member of the CAPAE council recounts:

”Once we have gained certainty that things could be done, I contacted person in charge of Veolia on the national level, [and] I received him in my office. I asked him the question: ‘We want [FFPT] in our city: are you in? [...] I assure you, the CEO thought about it for five, maybe ten seconds [even though] they had never done it. [...] From then on we developed [FFPT] together. [We have made] a private company accept a totally innovative and complex policy [...] and it is quite striking to see a private company working hand in hand with a left-wing municipality like ours” (AU-10)<sup>5</sup>

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<sup>2</sup> Semi-structured interview with an former member of the Council of CAPAE.

<sup>3</sup> Semi-structured interview with a member of the city council of Aubagne.

<sup>4</sup> Semi-structured interview with a mayor of one of CAPAE municipalities.

<sup>5</sup> Semi-structured interview with a former member of the Council of CAPAE.

The right-wing majority was the only important stakeholder to have initially opposed the fare abolition. Yet, having secured the majority in CAPAE council in the aftermath of the 2014 election, the right-wing politicians claimed to have been favourable to FFPT idea from the start, as “reinstalling fares would be impossible, if not suicidal.”<sup>6</sup> This stance was mirrored two years later by officials of the newly-established MAMP. Despite advancing entrepreneurial urban policies in Marseille, the exceptional status of the fare-free system in CAPAE is to be maintained at least until 2025 (Métropole Aix-Marseille Provence, 2016)—effectively sealing the pro-FFPT coalition that spans positions, interests and territories.

In Tallinn, the process of conceptualising and executing the policy of fare abolition also hinged on forging a coalition that embraced various actors and stakes. At first, the proposal to hold a referendum on abolishing fares, made in January 2012 by Tallinn’s mayor (Savisaar, 2012), was “considered [...] out of the blue”<sup>7</sup>. FFPT had not been debated within the mayor’s Centre Party, which had governed Tallinn since 2005. The rationale and form of FFPT was thus initially conceptualised by the mayor’s office, and was not discussed between municipal officials, city councillors and local transport experts, many of whom were stunned by the idea. FFPT was announced as a way of attracting tax-paying residents to Tallinn, a social policy “providing mobility for all, especially the low- and middle-income groups and [...] the unemployed [while]” stimulating the economy [and] increasing labour mobility.”<sup>8</sup>

Regardless of the anticipated social benefits of FFPT, announcing the public vote on abolishing fares has clearly allowed the Centre Party to gain competitive advantage over its political opponents. The referendum on FFPT—which took place from 19 to 25 May 2012—was instrumental in forging a consensus about FFPT across the political spectrum. As it produced an overwhelmingly supportive result (75,5% votes in favour, with 15% turnout), the referendum enabled top municipal officials from the mayors’ office to limit the public debate, and to transmit the decision to execute fare abolition down

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<sup>6</sup> Semi-structured interview with a member of the city council of Aubagne.

<sup>7</sup> Semi-structured interview with an official at Tallinn’s municipal transport department.

<sup>8</sup> Semi-structured interview with an official at Tallinn City Office.

the administrative hierarchy. Unlike in Aubagne, the municipal transport authorities “had nothing to say about FFPT”<sup>9</sup>. Similarly, the local PT operator was informed rather than consulted about it. However, even though this decision was made by a single-party municipal administration, the support for it appears to have embraced a wider group of stakeholders, including members of the political opposition and transport experts who were initially against FFPT. The erstwhile opponents of fare abolition “don’t really see an exit strategy. [...] If we went back to the paid PT system, the negative impact would be far higher than positive impact.”<sup>10</sup> Should the Centre Party lose their grasp of Tallinn politics, the return of fares is far from certain.

The process of implementing FFPT in Aubagne and Tallinn thus hinged on cross-institutional top-down arrangements, which cemented rather than opened up the existing coalition of key local transport stakeholders. Despite its apparently radical and transformative character, the emergence of FFPT solidified rather than altered the landscape of transport decision-making in Aubagne and Tallinn. Consequently, there was minimal engagement of actors representing the interests of PT passengers and workers in deciding about, preparing and executing the shift to a fare-free PT network. In Tallinn, FFPT did not alter the weak position of urban movements vis-à-vis the municipal authorities, and has not increased the scope of citizen participation, which was limited to rare and punctual moments, instead of relying on systematic meetings and established practices. The debate on fare abolition took place in already existing political spaces—the city council, local media, and Estonia’s national parliament—from which PT passengers and workers were largely excluded, and in which their interests were not well represented. One of the frontmen of the drivers, controllers and social workers accompanying passengers and cleaning vehicles thus complains that “when the company announced [FFPT] [...] we discussed it only among ourselves”<sup>11</sup>.

In Aubagne, on the other hand, strong participatory traditions in urban policy-making and planning did exist prior to FFPT. They involved a variety

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<sup>9</sup> Semi-structured interview with a member the board of Tallinn’s municipal PT company (Tallinna Linnatranspordi AS).

<sup>10</sup> Semi-structured interview with a local transport and mobility expert in Tallinn.

<sup>11</sup> Semi-structured interview with a low-rank employee of Tallinn’s municipal PT company (Tallinna Linnatranspordi AS).

of practices, institutions and spaces: neighbourhood councils and centres, participatory budgeting, CAPAE-wide activist forum, and a committee of PT users that convened infrequently to discuss technical details about the local PT network. As a local activist recounts,

“Municipal and agglomeration authorities have developed a strong commitment to participation, they wanted to implement a participatory democracy in a whole variety of domains. I think this was known by the whole population, they were plenty of meetings and workshops organised all-year round. For example, [...] every year when [it was time to] draw the municipal budget, meetings were held in all neighbourhoods of Aubagne to discuss the people’s needs, to ask them what they they wanted the [municipal authorities] to do.”<sup>12</sup>

However, instead of employing these instruments, the “rainbow coalition” internalised the debate about FFPT. As FFPT was used as part of the electoral strategy and was therefore announced shortly before the vote,” there was no participatory debate about the transport question, [nor] was there any discussion in the municipal council.”<sup>13</sup> Despite the commitment of the “rainbow coalition” to participatory democracy, its representatives openly refer to FFPT as “a top-down project”<sup>14</sup> that bypassed existing neighbourhood associations and movements and therefore “did not work [...] with citizens”<sup>15</sup>. A local activist bemoans that

“The municipality [of Aubagne] and [CAPAE] were both very powerful in terms of their vision and political will, but much weaker in terms of participation. [...] FFPT was a top-down project in the first place. Participation did not work. It was always the same people at the meetings which did not make much sense, had no decision-making power. [Towards the 2014 election,] the left-wing [members of the municipality and agglomeration councils] have distanced themselves too much from the people. That is also the reason why they lost the election”.<sup>16</sup>

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<sup>12</sup> Semi-structured interview with a member of local citizen association.

<sup>13</sup> Semi-structured interview with a former mayor of one of CAPAE municipalities.

<sup>14</sup> Semi-structured interview with an former member of Council of CAPAE.

<sup>15</sup> *Ibid.*

<sup>16</sup> Semi-structured interview with a member of local citizen association.



Figure 1. Posters used in the promotional campaign that engaged local bus drivers to announce the abolition of fares across CAPAE. The slogan of the campaign—“fare-free public transport is as easy as saying ‘hello’”—supposedly refers to the fact that upon boarding passengers are obliged to do no more than greet the driver.

Thus, in the process of conceptualising fare abolition in Aubagne the interests of PT passengers and workers were not represented. The latter were invited to visit an existing FFPT programme in Châteauroux (France), “to get convinced and bring a positive message back home”<sup>17</sup>. To further respond to their initial fears about a switch to a fare-free network, drivers were also engaged in a promotional campaign announcing FFPT from posters on board buses, and in leaflets distributed at bus stops (see *Figure 1* below). According to local transport officials, “drivers became the face of the project [...] to re-

<sup>17</sup> Semi-structured interview with a low-rank employee of CAPAE’s PT company (TrasDev).

spond to their doubts and anxiety. [...] They were not sure what would become of them, afraid that [FFPT] would bring huge crowds on board of buses”<sup>18</sup>. Yet despite this engagement, drivers report that they were informed rather than consulted about the decision to implement FFPT: “we had to learn to adapt to the new situation”<sup>19</sup>.

Only once the decision to switch to FFPT in Aubagne has been approved and announced, did a participative process begin. It assumed a profoundly inclusive character—in preparation for fare abolition, open debates took place within neighbourhood committees and the committee of PT users. Meetings and events began to take place on board of buses, dubbed “meeting places” (“*bus lieu d’échange*”). A symbolic “celebration of free public transport” (“*fête de la gratuité*”) was held on the 15th May 2008—the day when free rides were first introduced—and would hereafter be repeated on the same date in following years. Additionally, two participative workshops focused on mobility were launched. Local officials enthusiastically praise these participatory activities as “the greatest experience of [their] life”.<sup>20</sup> They emphasise that the debates and workshops were open to all participants, in particular those who did not hold any formal offices or have significant expertise in transport planning, joined by representatives of a plethora of local associations and movements, as well as municipal councillors and technicians (Service communication de la Ville d’Aubagne, 2012).

However, several doubts can be raised about the allegedly interactive and deliberative dimension of citizen participation that followed the introduction of FFPT in Aubagne. According to the local officials, its primary goal was “to inform, promote and legitimise [...] the project”,<sup>21</sup> and to “explain how things work[ed].”<sup>22</sup> However, its timing indicates that PT users were not to partake in the actual decision-making about fare abolition, and have not been empowered to assume more responsibility within the fare-free network. As one of the participants of FFPT workshops recalls:

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<sup>18</sup> Semi-structured interview with an official at the Transport Department of CAPAE.

<sup>19</sup> Semi-structured interview with a low-rank employee of CAPAE’s PT company (TransDev).

<sup>20</sup> Semi-structured interview with an former member of the Council of CAPAE.

<sup>21</sup> Semi-structured interview with an official at the Transport Department of CAPAE.

<sup>22</sup> Semi-structured interview with an former member of the Council of CAPAE.

“We have worked with technicians all the way until the actual [tram] works began. We started with a blank page, [and] there were no pre-established agendas. [...] But, on the one side, you had technicians working on the project 35 hours a week, and councillors who worked on it from 10 to 15 hours per month. On the other side, there were us, citizens, [...] [involved] 3 to 4 hours per month. Sure, we made a huge contribution, we influenced things but... Well, us, citizens, we were not on the same level. We did not have the same power.”<sup>23</sup>

Put simply, the ambition behind FFPT has not been to significantly strengthen the citizens’ capacity to appropriate and produce urban space, and as a result it does not appear to have altered the local power relations.

### **5. FFPT and power: “we can still do what we want to”**

In many ways, FFPT has put the political ahead of the technical. Firstly, it was conceived as an inherently political and electoral project, rather than as a purely technical solution, and was authored and advanced by elected officials rather than transport experts. The latter, having initially opposed it and deemed “not possible to realise”<sup>24</sup>, were eventually forced to adapt their models to a fare-free scenario. Secondly, unlike a plethora of transport-related decisions, instead being approved behind closed doors of transport planning bureaus, fare abolition was put to a public vote. Although, as demonstrated in the previous section, the debate about it was far from becoming interactive and deliberative, potential opposition or support to fare abolition could nonetheless be expressed by electing a pro- or anti-FFPT coalition (Aubagne), or by directly voting in favour or against FFPT in a referendum (Tallinn). Thirdly, even though citizen participation was limited to casting a ballot, it nonetheless allowed to place PT on the agenda, providing an opportunity for an unprecedented reflection on the quality and role of collective transport.

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<sup>23</sup> Semi-structured interview with a workshop participant, member of local citizen association.

<sup>24</sup> Semi-structured interview with an former member of the Council of CAPAE.

However, despite its emphasis on the political dimension of transport, FFPT does not appear to have challenged the existing power relations underpinning mobility in Aubagne and Tallinn. In both cities it was introduced by incumbent mayors, rather than those aspiring to come to office—it acted as a measure helping to further consolidate the power of existing local coalitions, instead of altering the landscape of stakeholders involved, and allowing to question the top-down priorities and procedures in local transport policy-making. Its contribution (rather than contestation) of the *status quo* proved a relief to municipal transport engineers. One of them reports: “we quickly realised that [FFPT] would cause no major disaster, make no major change [...] and that we can still do what we want to”<sup>25</sup>, continuing to focus on improving the overall quality of PT by increasing its frequency, speed and comfort, renewing the vehicle fleet, and expanding the network of right-of-way bus lanes.

This further means that providing unconditional access to PT has not involved transferring towards PT workers significant power over how transport policies are designed and implemented. In both Aubagne and Tallinn the working conditions have improved as a result of abolishing fares. While the working hours and salaries remained the same, drivers no longer have to sell and control tickets, and handle cash throughout their working day. This means “no more stress [...] about fare-dodging, checking tickets [...] as drivers] can focus on driving and welcoming passengers”<sup>26</sup>. In Aubagne, FFPT has also considerably improved the relations between bus drivers and passengers, as it “became the question of pride, something that belongs to them, that they care for”<sup>27</sup>.

The fare abolition has effectively “transformed the profession of drivers, who now has only one question in mind: ride their bus well”<sup>28</sup>. Nonetheless, their position within PT companies is the same, if not weaker. In Tallinn, although drivers can join a company-based trade union, their actual

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<sup>25</sup> Semi-structured interview with a low-rank employee of Tallinn’s municipal PT company (Tallinna Linnatranspordi AS).

<sup>26</sup> Semi-structured interview with a low-rank employee of CAPAE’s PT company (TransDev).

<sup>27</sup> *Ibid.*

<sup>28</sup> Semi-structured interview with an former member of the Council of CAPAE.

capacity to engage in collective bargaining continues to be severely limited by a system in which individual salary bonuses are not awarded to employees that raise any objections to the company's policy. With or without fares, "there is a fixed bonus every month: [...] if you drive on time, the bonus comes, but if you make a [complaint] then the bonus can be reduced."<sup>29</sup> In Aubagne, FFPT was implemented in the context of a parallel shift from a "family-like business" (Giovanangelli & Sagot-Duvauroux, 2012) to a privatised network run by a local branch of Veolia. For one of local trade unionists, this highlights "a major contradiction between abolishing fares and letting a private company [...] manage it [...]." Although Veolia adhered and adjusted to FFPT, it simultaneously implemented a series of measures "rationalising" the PT network. For instance, driver's individual punctuality began to be measured by a GPS system, their responsibility over managing the company gradually diminished:

"[A decade ago], it was a company that managed itself [...]. Whatever had to be regulated, was mostly the responsibility of the drivers. [...] The company was managed among us, drivers. [...] And now [...] it's the [IT centre] that manages us. [...] We don't have as much responsibility as before. [...] We have moved from being looked as people to being looked as numbers. And this has changed everything."<sup>30</sup>

Furthermore, the board of the PT operator insists that the drivers do not join the trade union of their choice—Confédération générale du travail (CGT, General Confederation of Labour), and instead are "forced to join CFDT [Confédération française démocratique du travail, French Democratic Confederation of Labour]—a trade union that was easier for the management to [accept], [...] that is a trade union of compromise, not a trade union of struggle."<sup>31</sup> This struggle, therefore, has not been made any easier by FFPT.

Even more profound changes in labour conditions have been witnessed by ticket controllers. In Tallinn, as many as 70 out of 80 of them were simply made redundant, which was possible because unlike the drivers, controllers did not belong to any trade union. In Aubagne, instead being laid off, con-

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<sup>29</sup> Semi-structured interview with a low-rank employee of Tallinn's municipal PT company (Tallinna Linnatranspordi AS).

<sup>30</sup> Semi-structured interview with a representative of a local trade union.

<sup>31</sup> *Ibid.*

trollers became responsible for maintaining security on board of buses, as initially there were numerous concerns that fare abolition would result in vandalism. As security issues were quickly understood to be minor, controllers were further directed to supervise the drivers' attitude and performance, following the policy of network "rationalisation"—instead of controlling the passengers, they now control other workers. This shows that albeit FFPT has the capacity to empower PT passengers, it can be incorporated into strategies oriented towards disempowering PT workers.

## 6. Conclusions

The analysis of the process that led to the abolition of fares in local PT networks in Aubagne and Tallinn re-emphasises the importance of inquiring into how transport policies are made, who participates in transport policy-making, and what effect it has on power relations that undergird mobility. I argued that looking into these issues involves detecting coalitions of actors that function as a driving force behind conception and execution of particular transport solutions, and to what extent passengers and workers of PT networks—and, by extension, urban inhabitants—participate in this process. The policy of fare-free public transport (FFPT) is a particularly salient case for such an inquiry, as a measure that is strongly contested by many transport academics and practitioners (Cats, Susilo, & Reimal, 2017; Fearnley, 2013; Storchmann, 2003), and thus does not belong to the catalogue of consensual "best practices" in urban transport. At the same time, a handful of urban activists and critical scholars have argued that FFPT has a transformative on cities in social, political and ecological terms (Dellheim & Prince, 2017; Schein, 2011).

The study of FFPT programmes in Aubagne and Tallinn revealed that fare abolition has the capacity to re-politicise the transport debate, and frame transport-related choices as inherently political rather than purely technical. However, in both cities it appears to have been designed entirely by pre-existing coalitions of local stakeholders. The transition to a fare-free PT system was not accompanied by a significant redistribution of power over transport policy-making. This power continues to reside within pre-existing elite coalitions, who continue to define transport-related priorities as well as to control how they are translated into specific transport instruments. FFPT could thus

be interpreted as a measure helping local elites to reaffirm their capacity to govern, to cement a local urban regime in their favour. No actor external to these coalitions—and in particular no actor directly representing the interests of PT passengers and workers—has played a significant role in deciding about and preparing FFPT in neither of the two cases studied. Thus, implementing a seemingly “radical” policy such as FFPT does not guarantee advancing an effective change of local coalitions of interests.

These findings suggest that alongside being scrutinised against their impact on mobility patterns, transport policies should ultimately also be studied as *urban* policies, in the framework provided by critical traditions of urban scholarship. In this sense, I wanted to demonstrate that the process of decision-making about whether, when, where, and for whom to implement a given transport instrument is key to the understanding of its outcome. This is because transport policies do not operate as models or templates that function uniformly across localities and cases, even if their underlying idea—such as the abolition of fares—may seem very simple and straightforward. At the same time, the paper has also shown that studying transport policies such as FFPT can be used as an entry point for analysing how participation and power over urban politics are enacted, and thus contribute to a better understanding of how urban politics operate.

## Acknowledgments

I would like to thank David Bassens and Mathieu Van Criekingen for many inspiring comments and conversations around the numerous draft versions this paper. Needless to say, none of the two bears any responsibility for the arguments presented here, which remain my own.

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## Chapter 7

**Towards an urban political  
geography of transport:  
Unpacking the political and scalar  
dynamics of fare-free public  
transport in Tallinn, Estonia**

# Towards an urban political geography of transport: Unpacking the political and scalar dynamics of fare-free public transport in Tallinn, Estonia

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This chapter has been submitted to *Environment and Planning C: Politics and Space* and is currently under review.

## Abstract

In this article, we study the largest fare-free public transport (FFPT) programme to date, launched in 2013 in Tallinn, Estonia. Instead of focusing solely on the rationale and impact of FFPT in terms of finances and travel patterns, we propose to analyse Tallinn's fare abolition programme from the perspective of urban political geography, and to inquire into its political and scalar dynamics. We analyse how Tallinn's FFPT was developed, and demonstrate the politics of its conception and implementation. We observe who has access to free travel revealing the fundamental embedding of the FFPT in Estonia's place-of-residence-based taxation system. Finally, we identify where lies the key impact of the territorial competition exacerbated by the FFPT. We argue that transport policies—of which FFPT is but an example—should be understood as much more than strategies dealing with transport issues per se. Instead, we propose to approach them as political and spatial projects, whose processual, cross-sectorial and scalar dimensions help to reveal the embeddedness of transport in inherently urban questions of metropolitan governance, electoral strategies, territorial competition and socio-spatial inequalities.

## Keywords

public transport, fare-free public transport, urban political geography, transport justice, transport policy, Tallinn

## 1. Introduction

This paper analyses the policy of fare-free public transport (FFPT) from the perspective of urban political geography. Implemented in nearly 100 municipalities worldwide, FFPT is a seemingly clear-cut case of a transport measure working towards justice. Since fare-free programmes provide unconditional access to collective transport regardless of one's (in)ability to pay, their allegedly "just" character has been praised by scholars (Larrabure, 2016; Santana and Silva, 2013; Schein, 2011) and activists (Planka.nu, 2016) in contexts as diverse as São Paulo (Brazil), Toronto (Canada) and Stockholm (Sweden). Nevertheless, the recently opened debate in transport geography about "transport justice" (Beyazit, 2011; Gössling, 2016; Martens, 2017; Pereira et al., 2017) offers a limited framework for comprehending the politics of FFPT, as it centres upon the outcomes produced by transport planning, and pays little attention to the decision-making process in which potentially "just" transport policies are implemented. Urban political geography could provide tools for understanding the process in which specific transport solutions such as FFPT are conceived, and for analysing them beyond their impact on mobility patterns, and across territories and scales. However, this discipline has not profoundly engaged with questions related to transport. Our proposal is to build on notable exceptions to this lack of engagement (Addie, 2013; Enright, 2016; Farmer, 2011; Keil and Young, 2008), and to combine their insights with those of emerging critical approaches in transport geography (Kębłowski and Bassens, 2017; Reigner et al., 2013). We thus want to reveal the political, cross-sectorial and scalar dimensions of transport policies, and to demonstrate the value of analysing transport instruments to understand urban politics writ large.

We focus on the political and scalar dynamics underpinning the FFPT programme in Tallinn (Estonia) as possibly the most salient case for exploring the policy of fare abolition. Introduced in 2013, Tallinn's FFPT is the largest existing programme of this kind worldwide. A self-declared "capital of free public transport" (Savisaar, 2013), Tallinn acts as one of the central nodes in a growing network that brings together municipalities experimenting with FFPT by organising frequent thematic conferences, hosting international delegations of transport practitioners and decision-makers, promoting fare abolition in international media (e.g. Shearlaw, 2016), and sending representatives to cities across Europe.

The few studies that have so far scrutinised Tallinn's FFPT (Cats et al., 2014, 2017; Galey, 2014; Hess, 2017) address it primarily as a transport planning instrument, focusing on its capacity to increase PT ridership and modal share, and to generate more sustainable mobility patterns. Some of this work has also highlighted the social dimension of FFPT, as the fare abolition has increased the usage of PT among the poor, unemployed, youth and elderly (Cats et al., 2017). Yet, these interpretations of FFPT have described rather than analysed the process of policy-making behind fare abolition, and they have not inquired into the wider spatial implications of FFPT (Galey, 2014; Hess, 2017). To respond to this literature gap, this paper seeks to more comprehensively highlight how FFPT is a spatial policy that is neither solely nor even primarily concerned with transport. We therefore argue that fare abolition merits discussion in a political geography journal, as it allows to explore the intersection of the spatial and political, not least on the urban scale.

Three broad objectives underpin our study. Firstly, we demonstrate that conceptualising transport justice hinges on grasping the political process in which particular transport measures such as FFPT are conceived and implemented, scrutinising their embeddedness in urban politics. Secondly, we argue that as transport policies are particularly cross-territorial, studying them may require incorporating an explicitly scalar dimension. Thirdly, we hope that this approach shows the value and importance for the field of political geography to inquire more frequently and profoundly into transport as a vehicle for understanding the political and scalar dynamics that underpin urban development. Consequently, with this paper we expect to expand the yet thin layer of political analyses of transport agendas and instruments.

To meet these objectives, the article proceeds (in Section 2) by discussing the challenge of addressing the political and scalar underpinnings of transport instruments, making note of the particular relevance as well as the limits of the concept of transport justice for scrutinising the politics of transport policies. It further reflects on the existing debate on FFPT, in which contradicting views on fare abolition perceive it as an uneconomic or unsustainable mobility tool, or a potentially just and transformative urban policy. Section 3 provides a detailed analysis of Tallinn's fare abolition programme. We discuss *how* the policy of fare abolition was developed, demonstrating the politics of its conception and implementation (in Section 3.1.) We further inquire into *who* has access to free travel, revealing the fundamental embed-

ding of FFPT in Estonia's place-of-residence taxation system (Section 3.2). Finally, we inquire into *where* the impact of FFPT lies, analysing the dynamics of territorial competition exacerbated by FFPT (in Section 3.3.). Our conclusions gathered in Section 4 reflect on the relationship between FFPT and transport justice as exemplified by the case of Tallinn.

The analysis of this paper is based on mixed methods. First, we analysed the former studies and all publicly available statistical information related to Tallinn's FFPT. Second, we conducted 30 interviews with key Tallinn stakeholders including municipal officials, public transport authority representatives, city councillors and local activists to understand the process of developing and implementing the FFPT in Tallinn, and representatives of the surrounding commuting area, Harju county. Third, to capture the role of FFPT in the dynamics between Tallinn and the areas surrounding it, we carried out a brief survey to which we obtained answers from 60 municipalities across Estonia<sup>1</sup>. Fourth, we conducted a content analysis of approximately 250 articles from urban, national and international media, relevant policy-related juridical documents, and archival materials including recorded thematic discussions in the Tallinn city administration. Furthermore, one of the article authors participated as an expert in various transport networks in Tallinn and gathered informal statements by multiple individuals from different sides—material that is not directly used here but helped to verify observations regarding the collected material.

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<sup>1</sup> Among key questioned asked in the questionnaire were:

- a) Has your municipality lost any registered inhabitants due the implementation of the fare-free programme in Tallinn on 1st January 2013? If yes, how many inhabitants de-registered from your municipality between 1st January 2013 and 31st December 2015? What data sources support this observation?
- b) In what other ways has Tallinn's FFPT policy influenced your municipality?
- c) Do you identify your municipality to have lost or gained due to Tallinn's FFPT policy? In what way?
- d) Is your municipality planning to implement FFPT?

## 2. The politics of transport policies

Transport research has traditionally focused on movement as a “rational” issue of utility and efficiency, analysed and developed in a “neoclassical manner” using technocratic planning instruments (Kębłowski & Bassens, 2017). While sustainable perspectives on mobility that underpin much transport scholarship today have offered critical voices regarding the tenets of “neoclassical” approaches to transport (Banister, 2008; Hickman et al., 2013), they also continue to favour behavioural and technological recipes (Reigner, 2016), disregarding the systemic social and political underpinnings of problems it attempts to solve. The urban transport debate therefore appears to be centred upon the technological capacity of transport instruments in terms of making cities more “compact,” “resilient,” or “smart” (Debnath et al., 2014; Eichhorst et al., 2011; Holden and Norland, 2005). As much of the transport research is not attentive enough to the deeply social and political underpinnings of the ways in which transport agendas and projects are being conceived and implemented, transport scholarship remains largely de-politicised (Kębłowski and Bassens, 2017; Marsden and Reardon, 2017). At the same time, apart from some notable exceptions (Addie, 2013; Farmer, 2011), urban political geographers have not profoundly explored transport policies, focusing on transport agendas as examples of strategies for the generation of rent (Enright, 2016), or territorial assets in intra- and inter-urban competition (Graham, 1994; Keil and Young, 2008), with potentially negative effects on equity and justice.

### 2.1. From transport justice to an urban political geography of transport

The de-politicisation of the transport debate is reflected by the recent conceptualisation of transport justice. Recently emerged as a potentially fruitful way of politicising transport research—and a potential framework for studying allegedly “just” practices such as FFPT—it essentially imagines and describes a fair distribution of accessibility to all users (Martens, 2017). According to this perspective, while reducing price removes one of the potential barriers to accessibility, and may thus increase the level of justice in a PT system, it should nonetheless be also accompanied by an increase of network quality, expressed in terms of the network coverage, frequency, speed and

overall comfort. Furthermore, as argued by Pereira and his colleagues (2017), transport justice advocates should also pay attention to the local context of transport-related power relations.

However, the notion of transport justice—as conceptualised thus far—does not yet provide effective tools for exploring the politics of transport. Firstly, this notion seems largely embedded in the predominant understanding of transport policies as measures that are first and foremost concerned with the organisation of transport. In this way, it looks at transport in a mono-sectorial manner, in detachment from its interaction with other aspects and domains of urban development such as metropolitan governance, and electoral politics. Secondly, it is not sufficiently attentive to the wider production of inequalities, and it does not combine the analysis of processual and outcome justice, which are central to the “just city” as discussed by planning theorists such as Susan Fainstein (2010). Therefore, transport justice does not necessarily echo David Harvey’s (1973: 98) formulation of social justice as “the just distribution justly arrived at”. Thirdly, the current debate about transport justice does not embrace various territorial and inter-scalar effects of transport policies. It focuses on the challenge of achieving a “just” distribution of accessibility on a single scale, ignoring that transport policy could produce “unjust” consequences on other scales. Therefore, we recognise the need to attend to the “scalar politics” of allegedly “just” transport instruments (Amin, 2002; MacKinnon, 2010).

Drawing from the limits of transport justice, we suggest a more explicitly political approach to transport which offers a processual, cross-sectorial and scalar perspective. This approach—which can be tentatively termed an urban political geography of transport—incorporates the recently emergent critical perspectives in transport geography on the one hand, and political geographical inquiries into transport on the other.

Critical scholarship in transport geography builds on the recognition of the capacity that transport has in terms of working towards social inclusion (Bonsall and Kelly, 2005; Lucas, 2006; Preston and Rajé, 2007) and social equality (Ahmed et al., 2008; Lucas and Jones, 2012), demonstrating the various socio-spatially splintering, socio-politically “unjust” effects produced by transport infrastructure (Graham and Marvin, 2001; Van den Berg and Pol, 1998). Within this scholarship, urban political perspectives act as a vantage

point for analysing power-relations that condition transport agendas, a theme that has been explored by transport geographers (Aldred, 2012; Gössling and Cohen, 2014; Marsden and May, 2006) and followers of the “mobility turn” alike (Cresswell, 2010).

Political geographical scholarship, on the other hand, focuses on regulatory norms and frameworks underpinning transport (Flyvbjerg, 1998; Soja, 2010). For instance, it shows how “sustainable” transport policies—which supposedly work towards reducing the use of cars in cities—are embedded in broad agendas of urban entrepreneurialism, neoliberal revanchism and “neohygienist morality” (Reigner, 2016). Transport policy is thus approached as one of the forms of collective consumption that can reflect entrepreneurial agendas (Furlong, 2015). As car ownership continues to be strongly (though not exclusively) linked to income, moving beyond automobility can have potential negative effects on social justice. Regarding PT, Enright (2016) demonstrates the fundamentally political role that “seemingly neutral transit proposals” (125) play in tackling and articulating socio-spatial divides in metropolitan agendas. Such transit and networked infrastructures are in a dual and conflicting nature where they “can certainly be employed in strategies for social justice, democracy, and freedom, but they can also be apparatuses of segregation, elitism, and authoritarianism” (126). Often, as Enright further observes in her analysis of the Paris metropolitan railway, those infrastructures embrace multiple scales and cross administrative boundaries. For instance, it shows how “sustainable” transport policies—which supposedly work towards reducing the use of cars in cities—are embedded in broad agendas of urban entrepreneurialism, neoliberal revanchism and “neohygienist morality” (Reigner, 2016).

Transport policies are therefore often embedded in “scalar politics” (Amin, 2002; MacKinnon, 2010), particularly strengthened by the cross-border nature of transport infrastructures highlighting the need to deal with questions relating to different scales. While such “scalar dimensions and repercussions” are frequent, they might not be visible in the situation of the status quo—where solutions to potential discrepancies might be solidified—but they may become particularly striking when changes come into friction against the “inherited scalar structures” (MacKinnon, 2010: 33). Newly devised transport policies can therefore challenge existing scalar structures and raise questions regarding the shortcomings of current governance spaces in

the context of functional metropolitan regions—even if a policy such as FFPT is allegedly implemented on the scale of only one city. In turn, this approach highlights the spatialisation of competition-driven politics within and between city-regions (Ward and Jonas, 2004).

## **2.2. Looking at FFPT through the perspective of transport justice**

The literature on FFPT has seldom recognised the inter-sectorial and inter-scalar political implications of fare abolition. Instead, it has primarily focused on the capability of FFPT in terms of generating a significant shift from private vehicles to public transport, pointing out the limited impact of fare-free programmes in terms of reducing car-related externalities such as air pollution, accidents and noise. However, even in terms of transport effects, there is significant scepticism towards FFPT. As in several localities free buses and trams have attracted more pedestrians and cyclists than car users (Fearnley, 2013; van Goeverden et al., 2006), fare abolition is criticised for having a smaller effect on driver behaviour than altering gas prices or tightening parking and road regulations (Cervero, 1990; Chen et al., 2011; Thøgersen and Møller, 2008). This leads the key proponents of sustainable mobility such as Vincent Kaufmann to declare that FFPT “does not make any sense” (CERTU, 2010: 2), and may be applied only in small and underused networks or as a secondary programme that does not aim at significantly changing the mobility patterns of the local inhabitants.

In opposition to technical and economic critiques of FFPT made by transport academics, several urban scholars and activist groups have identified FFPT as an explicitly political project that acts towards producing a more just city (Larrabure, 2016; Planka.nu, 2016; Schein, 2011). Opening public transport to all users has been recognised outside academia as an important ingredient of “just mobility” that “shows solidarity with the weak, with those who cannot afford a car, with those who are dependent on public transport, who are particularly affected by its drawbacks” (Brie, 2012: 8–9). FFPT is therefore argued to address head-on the issues of transport poverty and inequality across urban territory (Dellheim and Prince, 2017) and to provide PT

with the status of a “common good” that cannot be subscribed to market rules (Cosse, 2010) and resultant commodification (Schein, 2011). Abolishing fares is thus interpreted as an element of a wider political and spatial strategy aiming to transform urban power relations.

This evident discrepancy between different perspectives on FFPT suggests that reducing an analysis of a transport policy solely to issues related to mobility and traffic, devoid of their political—processual, cross-sectorial and scalar—implications, may result in producing an overly narrow analysis. Consequently, the remainder of this paper proposes to articulate the politics of transport instruments to inquire into the process of their conception, implementation, and development to place their allegedly just potential within a wider perspective.

### **3. Unpacking the political and spatial dynamics of FFPT in Tallinn**

Before attending to the political and spatial dynamics in the context of which FFPT was developed, it is indeed important to understand the role fare abolition in Tallinn has played as a transport instrument. FFPT was implemented in Tallinn on 1 January 2013 in the context of the simultaneous dominance of cars and strong presence of PT. While the use of private cars has been rising steadily ever since the collapse of the Soviet Union in 1991 (Grava, 2007), and today constitutes the main mode of travel for 37% of inhabitants, the share of PT nonetheless ranges from 40% to 60% of Tallinn inhabitants, depending how the modal split is calculated. In 2012, before the full implementation of FFPT, as many as 36% of passengers were exempt from paying PT fares, while a further 24%, among them students and the elderly, enjoyed partial reductions (Cats et al., 2017). Nonetheless, the annual municipal survey conducted that year revealed that 23% of Tallinn residents identified PT price as one of the key problems regarding transport in Tallinn (Tallinn municipality, 2014).

Reflecting upon the dominant perspectives in academic debates about transport, the few existing studies on Tallinn's FFPT (Cats et al., 2014, 2017) have approached it as a transport instrument, rather than a political and scalar project. Assessing the impact of FFPT on Tallinn's mobility paradigm, Cats et al. (2017) have used travel diaries and questionnaires to demonstrate that within one year after the implementation of FFPT the use of PT has increased by 14% (particularly among low-income groups), while observing an increase in the average distance travelled by car, and a simultaneous a shift from walking to PT. Two recent papers attempted to analyse the political context of Tallinn's FFPT: Galey (2014) and Hess (2017) have both looked into the political and institutional context for Tallinn's FFPT, but have not supported their studies with new empirical material, their analysis remaining rather thin. Our work builds on this literature and intends to expand it by engaging in a comprehensive analysis that allows us to investigate the political dimension of Tallinn's FFPT programme.

### **3.1. How: The politics of conceiving and developing Tallinn's FFPT**

FFPT has been Political with a big P from its first mention in the public debate in Estonia in 2005, when the Social Democrats advocated FFPT in their electoral pledges in Tallinn, and were later joined by the Green Party. In 2009, the liberal-conservative Pro Patria and Res Publica Union included FFPT in their programme in the local elections in Tartu, Estonia's second largest city. However, none of these parties acted upon their alleged interest in FFPT. It was therefore highly surprising when on 11 January 2012 Edgar Savisaar, the mayor of Tallinn, and leader of the Centre Party at the time, announced in the daily newspaper *Õhtuleht* that the city of Tallinn plans to hold a municipal referendum on FFPT two months later.

As an urban project conceived by Tallinn authorities, fare abolition immediately entered into Estonia's scalar politics. The national scale, which provides the main setting for policy-making in Estonia through a parliamentary governance system, has been dominated by liberal, right-wing parties, who governed the country from 1999 to 2016. Institutions operating at the regional scale focus on executing and monitoring state-led sectoral policies. The local scale has recently gained importance, not least due to the adminis-

trative reform in 2015–2017, which has strengthened the position of municipalities. Tallinn is the most powerful of them, as it hosts nearly one third of Estonia’s population, and produces over half of the country’s GDP. This city further constitutes an important exception in the Estonia’s predominantly right-wing political landscape, as since 2001 it has been almost uninterruptedly governed by a centre-left majority led by the Centre Party.

The process in which FFPT was conceived and developed defined it as inherently political project, rather than an instrument guided by technical analyses. The idea to hold a public vote on FFPT surprised local transport officials who, as our expert interviews reveal, appear to have been consulted only after the mayor’s declaration. They identify the mayor and his deputy as key decision-makers in FFPT, and admit that “it’s politicians that came up with [FFPT]”<sup>2</sup>. Accordingly, no mention of the idea of abolishing fares was to be found in existing urban development or transport-related strategies. A local activist bemoans that:

“At the moment, Tallinn does not have a general mobility plan [that would show] how to make public transport better. So Tallinn developed [fare-]free public transport, but has not developed a general plan for public transport. This plan is half-done, [...], and its development was stopped the day when [fare-]free public transport [came] to life.”<sup>3</sup>

In fact, Tallinn does not have an officially approved mobility plan, and its current drafts do not include FFPT<sup>4</sup>. Therefore, local experts declare that “in [our] field nobody knew that there was any kind of serious thinking about it.”<sup>5</sup> Moreover, as previous studies have shown, FFPT “was hardly a grass-roots demand” (Galey, 2014: 20), and did not emerge from any citizen movements. The emergence of the idea to abolish fares in this context visibly angers local transport experts:

“If we are talking about what is missing in the city at the moment, it is a general strategy about transport. This strategy is not there. [...] The city

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<sup>2</sup> Semi-structured interview with a member of a member of one of neighbourhood associations, 10 May 2016.

<sup>3</sup> Semi-structured interview with a local transport and mobility expert, 6 May 2016.

<sup>4</sup> Semi-structured interview with a member of Tallinn’s municipal transport department, 4 May 2016.

<sup>5</sup> Semi-structured interview with a local transport and mobility expert, 6 May 2016.

does something for everyone. If you are mainly a car user, we build new roads. If you are public transportation user, we make it free. If you are a cyclist, we build 10 kilometres of new cycling lanes: not in the city centre, but in the suburbs, in a forest. And if you walk, well, you can walk. So [the municipality] is trying to make something for everyone. [...] If there is a [political] strategy behind transport, and [fare-]free public transport [...] is to be an essential part of this strategy [...] we need to show some kinds of analysis. [...] Can the city really afford it? Where does the money come from? Where does it go? [...] What are the expenditures? [...] But at the same time the city is introducing a new large-scale road project? What the hell? Where is the general picture? Where is the large view of the situation?”<sup>6</sup>

Despite assuming an explicitly political character and largely bypassing the technical administration, Tallinn’s FFPT was implemented in a wholly top-down process, which somewhat contradicts its allegedly just character (Larrabure, 2016; Schein, 2011). At no stage were meetings organised to allow citizens to directly participate in the preparation or the decision-making. Consequently, as asserted by a municipal official, “no information campaign was needed [as] the job was done through the referendum” about FFPT<sup>7</sup>. While the public vote to some extent involved Tallinn’s inhabitants in the decision-making process about fare abolition, and became the centrepiece of the citizen involvement in the project, the referendum remains highly controversial for a number of reasons. Firstly, it was preceded by a continuous pro-FFPT campaign in the city-owned press and television, and, secondly, accompanied by an actual suspension of fares on the voting days. Thirdly, although only 15% of eligible voters participated in the vote, and its character was by definition merely advisory and not legally binding, the overwhelming support for FFPT expressed by 75.5% of voters was crucial for its further development, and virtually impossible for the Tallinn city council to question.

Subsequent discussions in Tallinn’s city council as well as local media have revealed a number of criticisms and concerns. The regional context and unequal distribution of access within Tallinn’s planned FFPT programme was addressed in the city council meetings. While centre-left supporters of FFPT have depicted it as an innovative urban policy, its liberal right-wing opponents have claimed that abolishing fares was a case of wasteful public

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<sup>6</sup> Semi-structured interview with a local transport and mobility expert, 11 May 2016.

<sup>7</sup> Semi-structured interview with an official at Tallinn City Office, 2 May 2016.

spending, and a policy that was bound to fail in terms of increasing the quality of public transport. This strong discrepancy has been reflected by the media debate surrounding the introduction of FFPT, in which a split could be observed between media outlets owned by the Tallinn municipality (*Pealinn* daily newspaper, *Tallinn TV* channel) and those managed by the state or private actors (daily newspapers *Delfi*, *Õhtuleht* and *Postimees*, as well as the Estonian public TV and radio broadcaster *ERR*). Some political opponents also criticised FFPT in media as way of attacking the Centre Party. However, this debate took place in the shadow of the overwhelmingly positive outcome of the public vote, which arguably stifled the discussion on fare abolition. For one of the municipal officials, “this is exactly what the referendum was for: it truly and effectively locked the decision politically.”<sup>8</sup>

The programme was launched and put in practice on 1 January 2013, well ahead of municipal elections in October the same year. Local commentators have therefore largely interpreted FFPT—as both the media analysis and interviews confirm—as one element in an electoral strategy that reaches far beyond transport-related considerations, and functioned “as a very good slogan [to be] put on the banners.”<sup>9</sup> Thus, looking at the process in which FFPT was developed reveals the profoundly political character of this project—beyond its technical, transport-related motivation—and further highlights a potential avenue for re-politicising transport scholarship (Marsden and Reardon, 2017).

### **3.2. Who: FFPT and the technologies of registering place-of-residence**

The rushed and non-participative manner of conceiving and developing FFPT challenges the official narrative that portrays fare abolition as a socially-oriented strategy. Centre Party members depict FFPT as a gesture towards the lower-income inhabitants and Russian-speakers, many of whom live in large residential districts and rely on PT to reach the city centre and their workplaces, and among whom the Centre Party enjoys particularly high popularity. FFPT can be understood as one of many social programmes

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<sup>8</sup> *Ibid.*

<sup>9</sup> Semi-structured interview with a member of Tallinn’s city council, 10 May 2016.

launched by the Centre Party in Tallinn, which have included the alleviation of land tax for Tallinn residents, offering cash payments to retired citizens on their birthday, and distributing free potatoes and firewood. Tallinn officials have described FFPT as an instrument “providing mobility for all [while] stimulating the economy [and] increasing labour mobility.”<sup>10</sup> Indeed, prior to the implementation of FFPT, low-income inhabitants, students, and pensioners were among particularly frequent PT users.<sup>11</sup> Although their study does not address the issue of justice, the 2012 municipal survey analysed by Cats and his colleagues (2017) show that the modal share of PT amounted to 65% among persons with net monthly income up to 300€ per month, and 63% among those earning 300-400€ per month, but only 39% among inhabitants with income above 1000€ per month. The same survey conducted in the following year, after FFPT has been introduced, shows that the provision of free tickets improved access to PT for a number of less-privileged groups. The modal share of PT increased among low-income inhabitants (+17% for <300€/month income group; +19% for 300-400€/month income group), and among less mobile groups such as the unemployed (+17%) and elderly (+12%), which indicates that FFPT improved their access to mobility. Nevertheless, assessing the precise impact that fare abolition has had on these figures is difficult as its introduction coincided with a long-term municipal strategy of improving the PT network: new vehicles were purchased, priority bus lanes were designed, a ‘smart’ ticketing system based on contactless cards was implemented, a new underground bus terminal in the city centre was built, and an information system was installed in vehicles and PT stops. This indicates that a potentially “just” character of a PT transport system envisioned by Martens (2017) hinges on a variety of elements, among which price is but one factor.

However, the apparent potential of Tallinn’s FFPT in terms of advocating transport justice appears to be at odds with its working principle: free travel is available only to registered residents of Tallinn, while commuters and visitors from beyond the city limits are still required to pay full fares. Consequently, the policy of fare abolition in Tallinn has been profoundly in-

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<sup>10</sup> Semi-structured interview with an official at Tallinn City Office, 13 May 2016.

<sup>11</sup> The 2012 municipal survey analysed by Cats and his colleagues (2017) reveals that the modal share of PT amounted to 65% among persons with net monthly income up to 300€ per month, and 63% among those earning 300-400€ per month, but only 39% among inhabitants earning more than 1000€ per month.

fluenced by the intricacies of Estonia's resident registration system, as well as dynamics of the taxation framework between the state and the municipalities. In turn, this demonstrates that analysing a transport policy such as FFPT from the perspective of justice involves means placing in the local political context (Pereira et al., 2017), but also scrutinising it in a cross-sectorial manner, beyond their impact on transport *per se*.

For Tallinn's FFPT is much more than just a transport policy. From the beginning, the municipality of Tallinn planned to finance it by increasing the number of its registered residents. This strategy was possible as local municipalities in Estonia are entitled to receive from the state part of their residents' personal income tax. Attracting new residents is thus a simple way to ensure external monetary inflow to the municipal budget. Tax-related income supplies on average 58% of Estonian municipalities' budgets—within this category as much as 91% of the revenue is raised from personal income tax coming from local inhabitants, which is a particularly high figure in comparison with other EU countries (Cumulus Consulting, 2014). Since 2014, 11,6% of the income tax from registered individuals is redirected from the centralized national tax system to local municipalities. How much each municipality receives thus depends on the amount of its registered residents, as well as on their personal earnings.

Consequently, central to the municipal funding strategies are the technologies of Estonia's place-of-residence registration system. Built around procedures that state authorities have no capacity to monitor or enforce, the system can be manipulated by residents. The law requires that a resident of Estonia informs the authorities within 30 days of a change of their place of residence. However, there is no punishment if this requirement is not met, and there is no formal way of controlling whether people actually reside under the declared address (Tammur et al., 2009). The lack of detailed enforcement procedures relates to the infamous *propiska*, a Soviet system under which registration was obligatory and internal migration was strictly controlled, and which continues to be deeply resented in independent Estonia (Nutt, 2010). Therefore, as the resident regulation system in Estonia is lax, there exists a substantial mismatch between the actual and the declared place of residence, which in some groups (e.g. youth) amounts to 30% (Tammur et al., 2009). Put simply, "it is hard to know where people are actu-

ally living.”<sup>12</sup> Residents often engage in “fake migration” registering themselves at their friends’ or relatives’ homes, or at their second home (Tammur et al., 2009). The reasons for engaging in “fake migration” include gaining access to residence-based benefits (e.g. kindergarten, school) or financially supporting the municipality with which one feels personally related.

Between May 2012 (seven months before the actual implementation of FFPT) and May 2016 the number of Tallinn residents increased from 415,000 to 440,000, while the registered population of Harju municipalities surrounding the city decreased by 14,000. While it is difficult to estimate how closely these dynamics related to FFPT, they are at odds with ongoing suburbanization in Tallinn’s wider metropolitan area (see also Leetmaa and Tammaru, 2007). Compared with previous demographic trends, the increase of registered population in Tallinn was particularly evident in the months preceding and succeeding the fare abolition (Estonian Statistical Office, 2017). This favours an interpretation that although possibly influenced by a number of factors unrelated to fare abolition, Tallinn’s population growth was strongly linked to FFPT at least shortly before and after the policy was introduced. This interpretation is crucial, as between 2012 and 2016 the revenue from personal income tax directed to Tallinn went up from €239m in 2012 to €344m in 2016 (Tallinn municipality, 2017). In this period, the average salaries of Tallinn’s population simultaneously went up by as much as 20%, which also translated to an increase of yearly personal income tax amounting to approximately €1,600 per person in 2016 (Tallinn municipality 2017). Nonetheless, if FFPT indeed was responsible for having “attracted” 25,000 tax-paying residents, the policy thus translated to €40m of additional revenue per year. The decreased revenue from PT fares—which still have to be purchased by commuters and tourists—over the same period amounted to about €10m per year<sup>13</sup>. To respond to increased demand, and increase PT frequency, its annual operational budget of increased by €11,7m from 2012 to 2016<sup>14</sup>. Overall, this indicates a surplus of approximately €16,1m per year. This means that alongside fare abolition there co-exist several dynamics that

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<sup>12</sup> Semi-structured interview with an official at a suburban municipality, 13 January 2017.

<sup>13</sup> Semi-structured interview with a member of Tallinn’s municipal transport department, 4 May 2016.

<sup>14</sup> Own communication with Tallinn Transport Board, 20th April 2017.

have affected Tallinn's tax-based revenues, which once more highlights the importance of looking across sectors when analysing FFPT.

Among Tallinn's new residents are those who physically moved to the city and those who only formalized their residency—according to Tallinn officials, the latter group represented 60% of the “new” inhabitants. This means that FFPT created a motivation for actual Tallinn inhabitants to formalise their residency, while at the same time it encouraged people who did not reside in the city to seek the possibility to engage in false registration.<sup>15</sup> It may seem that attracting residents just by offering free PT rides is difficult, since transport is a tool to gain access to activities and services rather than an aim in itself. However, Tallinn municipality refers to its earlier achievements in terms of attracting taxpayers—when in 2003 it offered residents a 40% discount on PT fares, Tallinn gained 30,000 “new” residents. Municipal officials claim to have “learned that by providing preferences [...] to residents, we can create massive registration, and we can, let's say, fill the budget.”<sup>16</sup> In this way, FFPT moves people not only physically, allowing them to be freely transported from place to place, but also legally, changing their place of residence in the official registry. As a result, financial resources are also moved from one territory to another, and in this sense FFPT appears to act as an area of collective consumption that is used to attract new residents and increase competition between Tallinn and the surrounding municipalities (Furlong, 2015). However, under Estonia's tax system, while individual tax payers may well use resources of more than one municipality—for instance by living in one locality and commuting to work or school to another—their income tax may be directed to only one of them.

### **3.3. Where: The territorial dynamics of Tallinn's FFPT**

Therefore, an analysis of fare abolition as a transport agenda cannot be completed without placing it within a scalar perspective. While on the urban scale (within Tallinn) FFPT has arguably helped to advocate transport justice by providing better access to mobility for under-privileged inhabitants, on the metropolitan scale (beyond Tallinn) the allegedly just dimension of fare

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<sup>15</sup> Semi-structured interview with a member of Tallinn's municipal transport department, 4 May 2016.

<sup>16</sup> Semi-structured interview with an official at Tallinn City Office, 2 May 2016.

abolition is questionable, since its effect are not distributed in a fair manner—a fundamental principle of transport justice (Martens, 2017).

For, as one of the local transport experts admits, “key problems in public transport in Tallinn begin at its borders”<sup>17</sup>. The increase in population and employment in Tallinn’s suburbs (in particular in the municipalities adjacent to the city proper) after the collapse of the Soviet Union (Tammara et al. 2009) and the resultant increase in mobility needs has not led to significant investments in regional PT, which fails to correspond to contemporary mobility patterns. These include the commute, on the one hand, to Tallinn from its periphery—where 50%–65% of workers travel to the city on a daily basis (Oidjärv, 2014)—and, on the other hand, from Tallinn to growing industrial and logistical centres and other workplaces in the extended suburbs. Consequently, mobility within Tallinn’s periphery is dominated by the use of private cars, as the approximate share of PT amounts to a mere 10%<sup>18</sup>. In this context, the abolition of PT fares within Tallinn’s administrative borders appears to have hardly addressed mobility issues within the metropolitan areas. It has not improved PT quality in the commuting area, and “made the situation much more dynamic [and] more difficult to manage”<sup>19</sup>. Instead of contributing to urban sustainability by helping to tackle urban sprawl and to integrate the transport system across administrative boundaries, FFPT appears to have exacerbated the political and economic competition between Tallinn and its suburbs.

Interviews and questionnaires reveal that the territorial impact of Tallinn’s FFPT has been uneven. The suburban and rural municipalities surrounding Tallinn can be divided into three groups according to their position in the FFPT-related dynamics. The first group consists of municipalities that have not been particularly affected by Tallinn’s fare-free experiment. Their residents primarily commute to Tallinn by car, or live too far from the city (over 100 km from Tallinn’s borders) to consider fare-free rides attractive enough to change their residency to Tallinn. The second group includes municipalities—scattered across the country and notably including Tartu, Esto-

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<sup>17</sup> Semi-structured interview with a local transport and mobility expert, 11 May 2016.

<sup>18</sup> Semi-structured interview with a local transport and mobility expert, 11 May 2016.

<sup>19</sup> Semi-structured interview with an official at Harju Country Government, 8 December 2016.

nia's second largest city—whose residents had moved to Tallinn for work or education in the years preceding the fare abolition, and formalized their residency to benefit from FFPT. In this case, Tallinn officials have described the influx of new residents as “just”, as the fare abolition means that the inhabitants that actually live in Tallinn are now making an appropriate financial contribution to its budget. The third group is where the negative impact of FFPT is more evident. It includes municipalities located up to 50 km from Tallinn, well-connected to collective transport that is used by a large share of local residents in their daily commute to the city, in particular the suburban trains that since October 2013 have been embraced by the FFPT system. The commuters may therefore engage in “fake migration” by seeking Tallinn residency in order not to pay for the part of the journey within Tallinn's administrative borders and thus reduce the cost of their daily travel.

Therefore, it is in the third group that the fare-free programme has created a financial imbalance between Tallinn and the suburban municipalities. On the one hand, while the city of Tallinn gained the income tax revenue, it did not necessarily bear the cost of receiving new residents. For instance, a child is not necessarily transferred to a Tallinn school when only one parent registers to Tallinn, and her education would therefore not constitute a cost for the Tallinn municipality. Inversely, the periphery lost part of its funds, while having to provide public services for the same number of residents. In other words, “Tallinn [has] obviously won [and] others have lost”<sup>20</sup>. It could be argued that as a Estonia's wealthiest and largest urban centre, boasting high average salaries and employment rate, Tallinn's strategy of attracting tax money from small municipalities, and requiring people from outside the city to pay for PT, in many ways violates the principle of fair distribution of resources. While the current residents of Tallinn can save money on their travels in the city, those outside are affected by the impact FFPT has had on their municipal budget, or more directly by needing to pay more for a single trip when visiting Tallinn—owing to the increase in the ticket prices for anyone not registered as a resident in Tallinn. On the other hand, Tallinn officials have argued that FFPT encouraged unregistered inhabitants, who used a variety of local services, to formalise their residency and start contributing to the city's budget<sup>21</sup>.

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<sup>20</sup> Semi-structured interview with a member of Tallinn's city council, 10 May 2016.

<sup>21</sup> Semi-structured interview with an official at Tallinn City Office, 2 May 2016.

The resulting territorial competition led several suburban municipalities to engage in economic and legal counteractions and disputes. A number of localities have strengthened territory-based local services for those who remained in their population register. This involved providing free train tickets to Tallinn, or free bus fares on the municipality's territory, indicating a competition-induced diffusion of FFPT. Several municipalities gave priority access to public services such as kindergartens and sports facilities to families in which both parents were locally registered. In the first group of municipalities, local authorities clearly recognise FFPT as an element of territorial and scalar competition:

“We do it the same way as Tallinn [does it]. [...] It is a competition all the time. If you get people registered here, you get their money, if you do not, you do not get their money. If people live here [while] being registered in Tallinn, Tallinn gets their money but we have to build roads [and] schools, and provide other services [...] Tallinn is currently winning this competition with [the policy of] free public transportation. [But] there are other ways of keeping our [residents] here. [...]”<sup>22</sup>

In the third group, however, the municipal officials find it difficult to emulate such strategies, and do not feel in a position to compete with Tallinn, openly admitting that “we are too small [...] What a big neighbour [...] does, a small neighbour like us cannot.”<sup>23</sup>

The difficult challenge of responding to Tallinn's FFPT led some municipalities to seek a legal way of contesting the policy. The municipality of Keila (15 km from Tallinn's administrative borders) argued that as free fares are provided only to Tallinn's registered inhabitants, the programme violates the European directives guaranteeing free movement of people, as well as Estonian PT law, as FFPT discriminates against citizens on the basis of their place of residence, and is not provided to all residents of Estonia (*err.ee*, 2013). However, Keila's official complaint to the Minister of Regional Affairs and the Chancellor of Justice of Estonia, the country's legal ombudsman, was rejected—the Constitution of Estonia allows municipalities to decide and manage

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<sup>22</sup> Semi-structured interview with an official at a suburban municipality, 11 December 2016.

<sup>23</sup> Semi-structured interview with an official at a suburban municipality, 16 December 2016.

freely “local life” matters, which include the management of local PT and the distribution of local social benefits<sup>24</sup>.

The case of Tallinn’s FFPT therefore reveals the territorial and scalar dynamics that underpin metropolitan politics (Ward & Jonas, 2004). The fare abolition was not conceived as a policy responding to urban and regional transport challenges, which include high levels of suburban commuting, and the poorly integrated and planned inter-municipal PT network. Instead, the it appears to have exacerbated territorial competition between the city and its periphery, as it was implemented by a single municipality in opposition rather than co-operation with other localities within a larger metropolitan system. Therefore, although existing within the precise administrative boundaries of Tallinn, the fare-free programme is deeply entangled in scalar politics that play out not only within the city, but also across the functional city-region and within the state institutions (Amin, 2002; MacKinnon, 2010). Not only does it highlight that transport policy is important beyond transport matters, and on multiple scales, but also shows that the nature and the effects on justice of apparently straightforward transport ideas—such as the one to abolish fares—are complicated and contradictory (Enright, 2016).

#### **4. Conclusion: the territorial politics of public transport**

We opened the article with the call to address urban transport as a political issue rather than viewing it merely as a technical instrument, and thus bridge the gap between urban political geography and transport scholarship. We argue that considering a transport project such as FFPT as merely a tool of transport planning does not allow to fully understand its rationale and impact. A purely technical, mono-sectorial analysis of fare abolition—for instance guided by the perspective that considers transport as contributor to sustainable development—may contribute to its understanding as a strategy that produces significant revenue for the municipality, yet does not challenge the dominance of private vehicles (Cats et al., 2017). However, we propose to

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<sup>24</sup> Lekko, K., adviser to Chancellor of Justice, formal response to Keila municipality, 8 July 2016.

significantly expand and explicitly politicise this perspective by incorporating processual, cross-sectorial, and scalar elements in the analysis of FFPT.

Our commitment to embrace the political and spatial dimensions of a transport instrument such as FFPT suggests a number of insights for both transport and political geography, highlighting a need for developing what we term urban political geography of transport. We engage in this task by drawing attention to important limits of the recently developed concept of transport justice (Martens, 2017), as well as to indicate complex and often contradictory nature of fare abolition as an allegedly “just” transport policy (Larrabure, 2016; Schein, 2011). We argue that as the perspective of transport justice tends to focus on the capacity of transport policies in terms of generating “just” and redistributive outcomes, it appears to disregard the potentially “unjust” process through which this outcome is achieved. Looking into the politics of the process in which FFPT was conceived and developed, we demonstrate that the idea of fare abolition in Tallinn originated as an electoral strategy helping the ruling political party to consolidate its power. In bypassing strategic mobility plans and local transport experts, FFPT thus emerges as an inherently political project. However, as it was developed in a non-participative way by a narrow group of stakeholders related to the mayoral office, it appears to have improved access to transport, while failing to open up access to the urban decision-making process.

We further show that the notion of transport justice pays insufficient attention to how an allegedly “just” policy interacts with other policy sectors—which may seem unrelated to the field of transport—and what impact it produces on different scales. Accordingly, FFPT should be considered as much more than just a transport policy per se, as it is strongly related to Estonia’s resident registration and taxations laws. The contribution of fare abolition to justice is intrinsically scalar, too. Within Tallinn borders, free travel functions as an explicit and radical strategy towards making PT more accessible for all residents—which encourages an interpretation of FFPT as a policy towards transport justice. Yet “mobility to all” allegedly offered by FFPT has clear territorial boundaries: embracing only the official residents of Tallinn, and separating them from commuters and visitors to the city. Therefore, one must look beyond Tallinn’s administrative borders to understand the role that FFPT plays in the territorial competition between the city and its periphery, in the course of which suburban municipalities have lost tax rev-

enue as their residents have engaged in real and “fake” migration to Tallinn by registering as the city’s residents.

We thus argue that developing an urban political geography of transport may be important for grasping the political dimension—and in particular the processual, cross-sectorial and scalar facets—of transport projects. The case of FFPT continues to demonstrate how transport planning derives from rather than shapes changing political agendas. Three years into Tallinn’s FFPT experiment, Estonia’s national government declared its willingness to abolish fares in regional buses across the country in 2018 (Vahtla, 2016). Notably, while prior to this announcement a transition to nationwide FFPT was considered technically impossible by transport authorities<sup>25</sup>, they appear to have adjusted to the changing political climate around fare abolition, demonstrating that transport models that successfully incorporate the fare-free component<sup>26</sup>. Thus, a policy that apparently tackles transport issues—of which fare abolition is but one example—can work towards goals loosely related to transport, and may be strongly related to inherently cross-sectorial and inter-scalar questions of metropolitan governance, electoral strategies, territorial competition and socio-spatial inequalities—all of which require much closer attention from political and transport geographers alike.

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<sup>25</sup> Semi-structured interview with an official at the Estonian Ministry of Economic and Communication Affairs, 12 May 2016.

<sup>26</sup> Own communication with an official at the Estonian Road Administration, 2 December 2016.

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**Chapter 8**  
**Conclusion**

# Conclusion

WOJCIECH KĘBŁOWSKI

## Abstract

This final chapter of the dissertation opens by discussing the neoclassical-sustainable hegemony in transport scholarship, and identifying its major shortcomings. It demonstrates how critical perspectives on transport could help to overcome this domination and thus widen the analytical lens through which transport policies are analysed. It then reviews how by applying a critical perspective, and in particular by referring to an analytical framework inspired by Henri Lefebvre's concept of "the right to the city" (RTTC), a number of political economy contradictions have been identified with regard to the policy of fare-free public transport (FFPT). It offers a synthesis of main theoretical findings of the dissertation, which primarily relate to the use of RTTC as analytical lens, and the consequent conceptualisation of transport policies as essentially urban phenomena. The concluding section highlights several directions for future inquiries into fare abolition. Finally, outlines potential pathways for further developing the critical transport scholarship by focusing on the challenge of developing decolonised/post-colonial approaches to transport.

## **1. Linking transport scholarship with critical urban studies to challenge the neoclassical-sustainable hegemony**

The overarching aim of this thesis, emerged from an interest in “alternative” urban policies and practices, is to provide tools for a “critical” inquiry into urban passenger transport. Why is such an inquiry needed? Offering an overview of the state of transport debate, Schwanen (2016) opens the first of three reports in *Progress of Human Geography* by bringing back a critique made in by Susan Hanson (2000), a former president of the American Association of Geographers, who nearly 20 years ago accused transport studies of having “become a quiet, some might say moribund, corner” (p. 469) of geography. She bemoaned the fact that transport geographers continued to rely on epistemological and methodological tools that had been created back in the 1960s. As a result, Hanson observed that the “mainstream” field of inquiry demonstrated a strong technocratic interest in efficiency, utility and speed of transport networks and modes, relying on empirical data rather than theory, and failing to reflect on the positioning and context in which its knowledge is produced and applied. Seemingly, “much has changed in geographers’ engagements with transport since the publication of Hanson’s critique” and, supposedly, “transport is no longer drifting away from the centre of human geography” (Schwanen, 2016, p. 127), and social sciences in general.

Yet, as demonstrated in the first part of this dissertation (Chapters 2 and 3), two sets of perspectives on urban transport, which I label “neoclassical” and “sustainable”, appear to be particularly dominant in the contemporary debate about transport scholarship, resulting in a limited perspective on their research object. The former perceives urban passenger transport through the lens of utility, efficiency and economic growth, all three expected to be achieved in a “neoclassical” fashion through “rational” planning and decision-making, employing “technical” tools such as econometric computation and forecasting models (Girnau & Blennemann, 1989; Grant-Muller, Mackie, Nellthorp, & Pearman, 2001). The latter assumes an apparently critical position vis-à-vis the predominantly economic tenets of the neoclassical approaches. It shifts the attention towards a series of environmental and societal questions related to urban transport, which is identified as a key component of a “good city” that is dense, diverse, economically vibrant, socially cohesive, and environmentally-friendly (Banister, 2008; Hickman, Hall, & Banister, 2013).

The influence of what could be identified as neoclassical and sustainable “circuits of knowledge” (Featherstone & Venn, 2006; Healey, 2013; McCann, 2008) is evident in their capacity to provide intellectual frames that “resonate” (Snow, Rochford, Worden, & Benford, 1986) with policy and practice. They are productive in terms of identifying challenges that are apparently central to contemporary transport—increasing the efficiency of urban transport networks, lowering the usage of cars and the impact of related environmental externalities—while advancing “innovative” policy and planning solutions. They are thus effective in terms of offering “intellectual fixes” that first mature in academic debates before continuing to inform broad agendas, or “political fixes”. These agendas in turn continuously give legitimacy to concrete transport projects, or “infrastructural fixes” (Healey, 2008), that together contribute to socio-spatial configurations, or “spatial fixes” (Harvey, 2008). I demonstrated and discussed this mechanism in Chapter 2, illustrating it with the case of the transport debate in Brussels, where this dissertation is situated. A growth-oriented and largely de-politicised dual hegemony of neoclassical and sustainable narratives was detected in Brussels, visibly providing a number of intellectual fixes that leave a series of political economic questions out of the academic debate, and consequently out of political agendas and infrastructural projects. As a result, the neoclassical focus on the question of car congestion together with the sustainable preoccupation with the domination of cars in Brussels’ space bracket off a reflection about the socio-economic and spatial inequality that is inherent in the way that the city’s transport system is produced and used. This is further confirmed by an analysis (in Chapter 3) of how the project of extending the pedestrian zone in central Brussels leaves unattended inherently political and social questions that underpin transport.

The empirical material from Brussels confirms that despite an ostensible tension between the proponents of neoclassical and sustainable perspectives, they share epistemological limitations, which effectively reduce their capacity to observe various configurations of intellectual, political and infrastructural fixes on which both sets of perspectives rely, and which they reproduce. The dialogue between the proponents of neoclassical, economy-driven approaches to urban mobility on the one hand, and advocates of more socially and environmentally aware conceptualizations of transport as a key component of a “good” city on the other hand, both appear to accept their disci-

pline is more concerned with technical and “rational” questions, rather than political ones.

While sustainable transport scholars and practitioners aspire to provide a view that is “alternative” to neoclassical perspectives—as they reflect on a number of social and environmental issues surrounding transport—they nonetheless do so by reducing most transport challenges to the question of improving, optimising and balancing traffic models. Even though “sustainable” may be a heterogenous term, the understanding and application of which may lead to fervent debates, it leads to the conceptualised of transport as potentially “smart”, “green” or “resilient,” and shift towards “transit-oriented development” is expected to produce more “mixed” and “dense” socio-spatially configurations. The analysis of sustainable perspectives further suggests that despite the existence of different positions in the transport debate, and different contexts in which transport instruments are implemented, a consensus has been reached around key values and principles that these instruments embody and follow. Specifically in the field of public transport, this consensus supposedly upholds a set of specific and predominantly technical rules that a “modern” and “sustainable” PT network should follow. Within its scope,

“intermodal connectivity, provision of high-quality services, clear strategic congruency, and integration of transportation and land use policy continue as unambiguous principles in contemporary transport planning practice. [...] Effective PT networks are legible, coordinated and frequent, and utilise transfers to service a diverse range of trips across urban areas. Formal PT networks should be multidestinal, providing access across cities along rapid, direct lines, especially for orbital trips. Lines which travel to the city center should continue through, and, where possible, most lines should extend to the city periphery, particularly where line speed can be maintained. Demand-responsive modes of transportation (such as bike sharing, ride sharing, autonomous cars, and demand-responsive buses) can broaden the catchment of formal PT systems, and service sporadic travel demand patterns which cannot be efficiently met with traditional bus or train services.” (McLeod, Scheurer, & Curtis, 2017, p. 223, 234)

The unambiguous and common application of these rules and the related “best practices” in public transport across a variety of cities and institutions thus informs an observation of:

“the emergence of a common passenger transport system typology in cities globally. We infer that almost all cities might be tending toward a typical archetype, where formal rail and BRT do the heavy lifting of moving large flows of people, in a high-frequency, multidestinational network, while the informal and on-demand sector compliments the system, expanding catchments in low-density areas, and servicing obscure trips at obscure times which PT cannot efficiently serve.” (McLeod et al., 2017, p. 234)

Thus, as demonstrated in the first part of the thesis (Chapters 2 and 3), albeit the “sustainable” approaches to transport incorporate a certain environmental and spatial sensitivity, the notions they produce and promote are increasingly converted into opaque technocratic buzzwords. In turn, the core ideas of neoclassical transport persist behind the facade of sustainable concerns, and within transport instruments allegedly geared towards sustainable goals. The sustainable perspective on urban transport thus falls short of questioning the principles behind neoclassical planning, and instead often merely proposes to adjust and improve the techniques it relies on, and models it produces. Put simply, despite their engagement in a seemingly productive dialogue, the neoclassical and sustainable positions dominating the transport scholarship are in fact part of the same policy orthodoxy, leaving several key political issues out of academic discussions.

As a result of the sustained neoclassical-sustainable hegemony—which could be identified as the current “mainstream” in transport—the contemporary transport debate rarely demonstrates a strong commitment to revealing and addressing various social, spatial, and political causes that make transport inefficient or unsustainable. It further does not seem sufficiently committed to exploring the geographical variegation of urban contexts in which particular transport instruments are applied, for instance within the anticipated transition towards sustainable mobility. Consequently, it often conceptualises transport policies as potential “models” that can be transferred across institutions and territories in detachment from the context in which they had been originally conceived. The uprooting involved in the process of mutation and mobility of transport means that the essentially political aspects of transport instruments are largely disregarded, and the fundamental question about *who* benefits (and loses) from thus conceived transport agendas is left unexamined.

This is evident in how despite the increased engagement among transport geographers in terms of exploring the question of neoliberalisation of transport agendas (Enright, 2013; Farmer, 2011; Grengs, 2005; Paget-Seekins, 2015; Reigner, 2016), the very concept of “sustainability” often acts as a discursive frame that helps to advance neoliberal policies (Béal, 2015), and does not help to explore the political issues shaping the relationship between transport and urban development (Béal 2017; Immergluck & Balan, 2017; Pow and Neo 2013; Schuetze and Chelleri 2015). The allegedly “alternative” view offered by sustainable approaches to transport does not show strong interest in analysing the complexity to power-relations that permeate transport policies and infrastructural projects, failing to acknowledge socio-spatial inequalities produced by transport agendas and solutions, notably those carrying the “sustainable” label. Put simply, within the “mainstream” contemporary debate about transport, there is little room for questioning the capitalist relations of power and labour that permeate transport. There is equally little interest among sustainable transport academics in terms of challenging the role that passenger transport plays in reproducing capitalism by providing a framework for moving people.

Yet, this role is evident, as the development of transport infrastructure on the global scale was fundamental to the emergence of what today is understood as capitalist mode of production, and continues to be central to its survival today. As noted by Kipfer (2012), as “the sail ships of the 17th and 18th century, the steamships of the 19th century and the cargo planes and container ships in the late 20th century were essential means of ‘shrinking the globe’ to minimize the circulation time of capital” (par. 11), the development of mass passenger transport was essential to the process of global urbanisation, connecting cities with their hinterlands. It further “made it possible for social relations to be stretched between work and residence, facilitating [...] the segregation of social groups along lines of race and class, and sustaining the sexual division of labour” (Kipfer, 2012, par. 12). The development of the Fordist paradigm of capitalism in the 20th century further hinged on an essentially neoclassical understanding of the role of transport as catalyst of economic growth, and its conception of car-based mobility placed the automobile as the central object of capitalist production, circulation and consumption. Today, the 21st century post-Fordist and austerity-driven variation of capitalism could be identified as largely unquestioned—if not at least partially supported—by the rise of sustainable narratives. As neoclassical ap-

proaches to transport see in capitalism a powerful motor of improving transport technology, the various sustainable transport “innovations” do not question the capitalist relations of power and labour, thus allowing them to reproduce. Instead of focusing on *why* mobility takes place, and whether its overall levels could be diminished, it is more preoccupied with the question *how* (through what modes of transport) it is organised, and consequently centres upon promoting a shift away from private vehicles.

Thus, the sustainable perspective on transport does not appear to have the tools to grasp the contradictory character of urban transport as inherent component of capitalism, in its parallel commitment to networking and speed on the one hand, at the cost of socio-spatial unevenness and divisiveness on the other. It does not see transport as an oft-employed strategy for dividing and controlling passengers and workers. Consequently, despite its apparent ambition to provide a critique of the “mainstream” neoclassical principles behind urban transport planning, and to provide a more comprehensive, “alternative” view on mobility issues, sustainable approaches fail to engage with the social realities of transport. As a result, the transport debate lacks a critical edge.

In this dissertation, I have argued that the search for “alternative” approaches and practices in urban transport should be directed away from the sustainable perspectives. Revealing systemic underpinnings of urban transport could be done by bridging the gap between, on the one hand, the scholarship that regards mobility instruments and policies as related primarily (if not solely) to transport, and, on the other hand, the perspectives that perceive transport practices as inherently embedded in socio-economic, political and spatial realities of the urban. In other words, the main research question that this thesis attempted to answer regards the ways of conceptualising and strengthening the link between transport and urban scholarship. As I argued in the introduction, there exist a number of pathways for theorising and practicing this connection—for instance by employing big-data analyses in the framework of “smart city” discourses, or by building on the scholarship on mobilities that centre on mobility as a phenomenon that is central to urban processes. However, I adopted the approach of relating to the traditions of critical urban theory, as well as what I identify as emerging “critical” perspectives developed in transport studies.

What brings these perspectives together, as discussed at length in the first part of the thesis, is their attempt to ask political economy questions—which are commonly formulated and explored in critical urban studies—about transport approached first and foremost as an urban phenomenon that should be analysed using tools developed in urban scholarship. Critical perspectives have discussed transport as an instrument of power, revealing regulatory frameworks, power-relations and political processes that condition transport agendas and practices, exploring transport policies as stakes that reflect conflicting interests and are deeply embedded in territorial strategies. They have further inquired into the position of transport users and workers in transport-related policy-making, and the labour conditions that particular mobility instruments involve—an issue that is virtually absent from debate about “sustainable” transport.

In opposition to the neoclassical and sustainable perspectives that identify an apparent consensus in transport policy and planning, critical views on transport reveal that this consensus hinges on leaving a variety of inherently political and urban questions out of the debate. It therefore demonstrates that “urban questions, often presented as ‘technical’ problems, are more than ever penetrated by profound antagonisms. They are much more a matter of social conflicts, than of consensus” (Van Criekingen, 2017, p. 5). In this sense, “critical” perspectives are not fundamentally bound up with methodological and epistemological positions, but with their capacity to “decentre” the “mainstream” debate dominated by neoclassical and sustainable narratives.

Undoubtedly, critical transport scholarship continues to grow. As geographers and social scientists from sub-fields across disciplines are increasingly interested and “re-engaged” with transport (Shaw & Sideaway, 2011), urban transport scholarship is “being drawn into multiple, at times difficult-to-reconcile directions [that] enrich geographical scholarship on transport through conceptual, theoretical and methodological diversification, making transport as object of inquiry exist in new ways.” (Schwanen, 2017a, p. 360). The discussion on possible pathways for critical explorations of urban transport is ongoing, and the full-day session on moving “*From sustainable to critical transport studies*” convened at the Annual Meeting of American Association of Geographers in 2017 was but one example of how urban and transport academics can engage in a critical conversation. However, the increased di-

versity of perspectives on urban transport does not necessarily mean that the neoclassical-sustainable hegemony is seriously questioned. As noted by Kwan & Schwanen (2016),

“although the field [of transport geography] is more vibrant, engaging, and concerned with more topical issues than many geographers believe [...], it remains slow in engaging with the wider philosophical and theoretical debates elsewhere in the discipline. It continues to struggle with the legacy of the quantitative revolution of the 1950s and 1960s and finds it difficult to reconcile the concerns of cultural and critical geography with the pressures exerted by cross-disciplinary dialogues with engineering, economics, and business studies and the unequal power relations characterising those dialogues” (p. 253).

The theoretical part of the dissertation thus revealed that the neoclassical and sustainable perspectives on transport continue to be dominant. While various elements of the counter-hegemonic critical perspective on urban transport exist, they remain fragmented and unable to effectively circulate and crystallise into a field reshaping transport agendas and policies.

## **2. Revealing political economy contradictions in FFPT**

The neoclassical-sustainable hegemony visibly permeates the debate about the policy abolishing fares in public transport (PT) networks: the research object of this dissertation. As discussed in Chapters 4 and 5, fare-free public transport (FFPT) systems have been criticised from the neoclassical position as a measure that supposedly poses the threat of financially destabilising PT networks, instigating “irrational” travel behaviour and generating “useless mobility” (Duhamel 2004). Furthermore, transport engineers and economists opposing the idea of ticket-free access to collective transport argue that it negates the essentially liberal perspective according to which PT is as a commodity that must always come at a price (CERTU 2010). From the perspective of sustainable transport, the abolition of fares has been argued to be inefficient in terms of attracting car users to public a modal shift from private vehicles to PT (Cats, Susilo, & Reimal, 2017; Cats, Reimal, & Susilo, 2014; Cervero 1990; Fearnley 2013).

However, the empirical evidence gathered and discussed in the dissertation—the analysis of the global landscape of FFPT (Chapter 4) and an in-depth study of FFPT programmes in Aubagne and Tallinn, and a secondary case study in Chengdu (Chapters 5, 6 and 7)—questions this critique of FFPT. First of all, despite a series of arguments against fare abolition, it exists in full form in nearly 100 municipalities. Although it is a somewhat exceptional practice—the majority of PT networks worldwide continue to charge fares—it is nonetheless a well-established one, and the number of FFPT cases worldwide is on the rise.

Most of these cases are located in rather small localities: the majority of them are second- or third-tier towns and cities with less than 100,000 inhabitants. Even so, the case of Tallinn provides an important exception to this rule, as do (now discontinued) full fare abolition programmes in Austin (Texas), Bologna (Italy) and Denver (United States, CO). Nonetheless, fare abolition in large urban areas (above 500,000 inhabitants) is either temporally-limited (with fares suspended in specific and recurring periods of time, e.g. in Singapore; Chengdu, China, Sichuan) or spatially-limited, with fares abolished on specific routes or in special zones (e.g. in Sydney, Australia; Baltimore, United States, MD; Manchester, United Kingdom).

It is important to note that the the geography of FFPT embraces towns and cities that seldom appear on maps drawn by urban and transport geographers, and are largely absent from urban debates. Their geography is highly variegated—although FFPT might appear to be a simple and uniform idea that “requires relatively low technological intervention” (Hess, 2017, p. 697), cities in which fares have been abolished do not appear to share a specific set of features, and important differences can be observed as to why FFPT is implemented.

On the one hand, FFPT appears to follow certain regional patterns, as socio-political and sustainable arguments in favour of fare abolition are particularly present in Europe and Brazil, while being less visible in the US, where economic rationales behind FFPT are more prevalent. On the other hand, the way in which particular municipalities justify FFPT seems to be loosely related to their political orientation. In other words, fare abolition does not appear to have a specific political “colour”, as it has been implemented by socialists, greens, centrists and liberals alike.

A multi-site inquiry into particular FFPT programmes—presented throughout Chapters 5, 6 and 7—further addressed the neoclassical and sustainable criticism of fare abolition. This empirical material shows, first, that this policy is not financially harmful to local PT authorities and operators. Rather, in each of the cases studied the implementation FFPT has been not has actually helped to generate new revenue that largely covers the reduced or eliminated income from fares. The financial feasibility of fare abolition has been achieved by providing free tickets to registered residents (Tallinn), raising taxes for local companies (Aubagne), or by generating operational savings (Chengdu). Each of these instruments is closely related to FFPT, and could not have been used without abolishing fares. These three particular forms of financing FFPT do not appear to be unique to the contexts of fare abolition programmes, as they are essentially examples of financing public transport through engaging in scalar politics (Tallinn), co-operating with local business (Aubagne), or re-organising the PT network (Chengdu). In each of three programmes, the revenue from FFPT is stable and is generated on a regular (annual) rather than singular basis, securing the financial stability of FFPT in the future. Secondly, the empirical material only partly confirms doubts raised about fare abolition by the proponents of sustainable mobility. FFPT may indeed appear somewhat disconnected from the broader commitment to advancing a sustainable transport paradigm, as it does not challenge the dominance of private vehicles in Aubagne, Tallinn and Chengdu, and is not implemented as a policy geared towards limiting car congestion. In other words, its ambition is to accompany rather than replace other policies that can limit car traffic by imposing congestion charging schemes and stricter parking regulations, or by downscaling car infrastructure. However, the impact of FFPT on the increase of PT usage is unequivocal, and its capacity to generate a small modal shift from private cars to PT has been observed in each of the programmes studied. Contrary to the critiques made by the advocates of sustainable transport, the implementation of FFPT not only has not impeded, but has actually indirectly contributed to existing efforts towards increase the quality of PT service. The public debate about fare abolition means putting PT back on the agenda, and raises public support for further investment in collective transport. The alleged choice between providing a high quality or a zero-price service thus appears inaccurately formulated.

Much less prominent in the debate about fare abolition are critical inquiries about FFPT. Apart from scrutinising the financial and mobility-relat-

ed consequences of abolishing fares, they also inquire into this policy by asking political economy questions. Formulated outside the academic field of transport and mobility by public officials, urban activists and journalists (Cosse 2010; Dellheim & Prince 2017; Giovanangelli and Sagot-Duvauroux 2012; Robert 2015; Schein 2011), they demonstrate the inherently political character of FFPT, and its potential as a social policy. As these voices operate on the fringes of the transport debate, this dissertation constitutes an attempt to strengthen them—and the critical approach to transport in general—vis-à-vis the neoclassical-sustainable hegemony. It therefore highlighted the urgency of re-embedding transport within critical urban studies by seeking and revealing political-economic contradictions that shape mobility policies and practices interwoven with urban development dynamics. In practical terms, it has developed a heuristic for studying urban transport policies as object that are inherently urban alongside their transport-related dimension. This heuristic takes form of a conceptual framework for the critical analysis of urban transport policies, which while formulated in a deductive manner prior to empirical research, was also further induced throughout the fieldwork. It is inspired by Henri Lefebvre’s (1996 [1968]) conceptualisation of “the right to the city” (RTTC), a theory originally conceived as a tool for critically analysing urban practices. Supported by secondary heuristics provided by critical readings of citizen participation in urban decision-making, and the literature on urban regimes and elite coalitions on the one hand, and the recently-emerged conceptualisation of transport justice on the other, my interpretation of RTTC translates into an analytical framework that allows to reveal key political economy contradictions of fare abolition. These contradictions demonstrate, on the one hand, the intrinsically urban character of the policy of fare abolition, and, on the other hand, show how particular urban contexts can be investigated through a lens of a transport policy such as FFPT.

The framework opens (see *Table 1* below) with questions about *participation* in the definition, elaboration and implementation of FFPT, to explore how this process engaged and affected different actors, and to what extent it enabled them to appropriate and produce urban space. This involves a shift in the usual attention of transport scholarship on the outcome of particular transport agendas and instruments, to incorporate an analysis of the process in which these agendas and instruments are made. In other words, the process of making a decision about whether, when, where, and for whom to

**PARTICIPATION:  
enabling appropriation and production of urban space**

<b>Inclusive?</b>	<ul style="list-style-type: none"> <li>• Reliance on long-term consensus forged by local urban regimes across various actors, stakes, and territories.</li> </ul>
<b>Deliberative?</b>	<ul style="list-style-type: none"> <li>• Passengers and workers informed that than involved;</li> <li>• Conflict and tensions around FFPT articulated only within formal institutions of representative democracy.</li> </ul>
<b>Reconciling the top-down and bottom-up?</b>	<ul style="list-style-type: none"> <li>• Narrow scope of actors involved: a top-down policy developed by established top-down actors and involving few bottom-up ones.</li> </ul>
<b>Interactive?</b>	<ul style="list-style-type: none"> <li>• Minimal participation of PT passengers and workers in deciding about, preparing and executing the shift to FFPT.</li> </ul>

**POWER:  
revealing and challenging its existing configurations**

<b>Political?</b>	<ul style="list-style-type: none"> <li>• Explicitly political rather than technical instrument;</li> <li>• FFPT as an articulation of local political identity: commitment to the public sector and resistance to neoliberal and market-driven agendas in transport.</li> </ul>
<b>Redistributive?</b>	<ul style="list-style-type: none"> <li>• Inhibiting and unjust process: the locus of transport-related decision-making stays within urban regimes, the process of transport policy-making remains largely unchanged;</li> <li>• Empowering and just outcome: expanding urban welfare by making public transport more accessible to all inhabitants, in particular the under-privileged ones;</li> <li>• Vastly improved working conditions of FFPT drivers, redundancies and transfers among ticket controllers;</li> <li>• No evidence of alliances between FFPT workers and passengers.</li> </ul>

**BEYOND transforming MOBILITY patterns:  
concerning all aspects of the urban environment**

<b>Multi-scalar and holistic?</b>	<ul style="list-style-type: none"> <li>• Capacity to promote inter-municipal solidarity and act against socio-spatial unevenness of public transport services;</li> <li>• Risk of contributing to inter-territorial competition and incorporation into urban marketing strategies.</li> </ul>
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<b>A UTOPIA on the HORIZON: reaching beyond existing socio-spatial configurations</b>	
<b>Effective and transformative</b>	<ul style="list-style-type: none"> <li>• Resisting and challenging the neoclassical-sustainable rationality;</li> <li>• Limited capacity in terms of ushering a profound transformation of society and space;</li> <li>• As a singular policy rather than wide-ranging political strategy;</li> <li>• Lack of direct commitment to reducing overall mobility levels: provision of a “right to mobility” rather than to a “right <i>not</i> to move”.</li> </ul>

*Table 1.* Main conclusions from the critical analysis of FFPT guided by the RTTC framework.

implement a given transport instrument is key—albeit not in any deterministic way—to the understanding of its anticipated and actual outcome.

This approach to the empirical analysis of FFPT programmes reveals that the process of executing the policy of fare abolition relies on coalitions forged between various actors and stakes, embracing different positions, interests and territories. In Aubagne, implementing FFPT required building a consensus between 12 municipal authorities of former Communauté d'agglomération du pays d'Aubagne et de l'Étoile (CAPAE), representatives of the private PT operator Veolia, and local business that agreed to co-subsidise the policy. Furthermore, while FFPT emerged as left-wing initiative, developed in juxtaposition with the market-driven approach to collective transport of the neighbouring city of Marseille, today it is supported by local right-wing politicians, and tolerated by the Marseille's transport authorities. In Tallinn, even though the idea to implement a fare-free programme was conceived by officials belonging to a single party that has dominated municipal policies in the last decade, the initial fervent opponents of FFPT—including the political opposition and local sustainable transport experts—today admit that a return to a paid PT system would be unlikely and detrimental to the overall quality of collective transport in the city.

However, the partnerships that underpin FFPT appear to be essentially top-down, bringing together established local actors that belong to local elite

coalitions, and involving hardly any bottom-up actors. Even if their interests as PT users are represented in the long run, there has been minimal engagement of actors representing PT passengers and workers in deciding about, preparing and executing the shift to a fare-free PT network. In Tallinn, where traditions of citizen participation in urban decision-making are weak, FFPT has in no way improved the fragile position of urban movements vis-à-vis the municipal authorities. In Aubagne and other municipalities of the former CAPAE, whose officials at the time of FFPT implementation took pride in long-standing traditions of bottom-up activism, existing participatory mechanisms and bodies were largely bypassed by the fare abolition project. Only once the decision to switch to a fare-free system has been made, did non-expert inhabitants begin to be included in the process of re-designing the fare-free PT system. FFPT therefore appears as a policy that does not change the way in which transport agendas and instruments are made—rather than open the access to the decision-making process about mobility, it employs a rather narrow scope of established and powerful stakeholders. In this sense, there is nothing particularly just about the way in which fare abolition comes to being. Nonetheless, as opposed to a great majority of transport instruments, it appears to be introduced and discussed as an inherently political project, for instance when put to a public vote in a referendum (Tallinn), or employed as a rallying call in local electoral campaign (Aubagne). It could be further argued that FFPT puts the political ahead of the technical, as it was discussed in public debates rather than within technical bodies of transport administration, or even bypassing strategic mobility plans and local transport experts (Tallinn). Nonetheless, expressions of disagreement with the idea to abolish fares, and conflicts related to it, could be articulated only within existing institutions of representative democracy, to which PT passengers and workers had limited access. Accordingly, they were informed about rather than involved in the shift to FFPT.

This leads to a series of questions concerning the capacity of fare abolition in terms of revealing and challenging existing configurations of *power*. Despite its political character, FFPT does not seem to have the potential to empower its users by expanding the locus of urban decision-making away from politics of urban regimes towards politics of the inhabitants. Instead, the empowering capacity of FFPT is limited to its outcome. Abolishing fares in Tallinn has resulted in making PT system more accessible to all residents, visibly increasing its usage among the unemployed, youth, elderly, and in-

habitants with low income. In Chengdu, providing access to a part of the PT network to all users, rather than registered inhabitants holding an exclusive urban *hukou* status, acts as a strategy for empowering rural migrants who do not have access to other domains of urban welfare. In this sense, FFPT can be interpreted as policy that acts towards transport justice in terms of the outcome it produces, and a measure that mitigates the socially uneven character of transport systems.

However, FFPT can be incorporated into strategies oriented towards disempowering PT workers. FFPT does not help to prevent an erosion of labour conditions of PT staff, and has not altered their position within local PT companies. The disappearance of tickets may lead to making controlling staff redundant (Tallinn), or reemploying them in a different role within the same PT operator (Aubagne). Furthermore, there is no evidence that FFPT allows to build alliances between workers and passengers. However, the profession of vehicle drivers is transformed under a fare-free regime, who can focus on driving in a safe and comfortable manner, as tickets no longer have to be sold, and fare-dodgers do not have to be identified and pursued.

FFPT appears to function as an essentially top-down policy allowing local coalitions to solidify their power, instead of transferring it to other actors and allowing to question or alter the existing urban regimes. At the same time, beyond the scale in which FFPT has been applied, the policy of fare abolition allowed to articulate ideological cleavages with the surrounding state institutions (Tallinn) and neighbouring municipalities (Aubagne). In the case of Tallinn, FFPT could be interpreted as part of urban social welfare, and a political statement that enabled municipal authorities to emphasise their commitment to the public sector, and at the same time their detachment from the essentially neoliberal, market-driven perspective on transport policy. In Aubagne, FFPT acted as highly symbolic step of developing a policy agenda alternative to entrepreneurial policies of neighbouring Marseille, whose officials regard transport as a integral element of land speculation strategies and socio-spatially divisive urban renewal programmes. In both cases, the decision to abolish fares was therefore a question of formulating

*Table 1.* A RTTC-inspired framework for critical analysis of transport policies and practices.

and foregrounding a local political identity, a way of resisting neoliberalisation and commodification of transport, and a strong statement emphasising its inherently political and public dimension.

The RTTC-inspired approach to transport thus entails analysing the relation of FFPT to broader agendas of urban development of governance, shifting the attention *beyond mobility* patterns, and attempting to grasp the relationship between fare abolition as a transport policy, and its impact on urban development writ large. This perspective reveals further political economy contradictions underpinning FFPT by highlighting its intrinsically spatial dimension. On the one hand, switching to a fare-free system can constitute a way of resisting inter-territorial competition. In Aubagne, one of its principle goals was to increase accessibility to PT across the territory of CAPAE, as opposed to increasing mobility opportunities in “key” areas of the agglomeration. Facilitating links among CAPAE municipalities, and conceptualising collective transport as “a glue that keeps our society and our territory together”<sup>1</sup> was thus an expression of inter-municipal solidarity. On the other hand, the same policy applied can derive from the opposite approach: in Tallinn, it clearly functions as an instrument of increasing attractiveness of the city vis-à-vis its periphery. Implemented by a single municipality, and limited within its administrative limits, FFPT has very clear territorial boundary. The apparent potential of FFPT in terms of empowering passengers and contributing to transport justice is at odds with its fundamental rule: free travel is available only to registered residents of Tallinn, while commuters and visitors from beyond the city limits are still required to pay full fares. Consequently, Tallinn’s fare-free programme does not aim at responding to urban and regional mobility challenges such as continuing urban sprawl, poorly integrated and planned inter-municipal PT network and high levels of suburban commuting by car. FFPT exacerbated a zero-sum competition in which suburban municipalities have lost tax-paying residents, while Tallinn has gained them. Therefore, as a policy developed in opposition rather than co-operation with other localities within a larger metropolitan system, FFPT is deeply entangled in scalar politics that play out not only within the city, but also engage institutions across the functional city-region, as well as national authorities.

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<sup>1</sup> Semi-structured interview with an ex-member of the CAPAE council.

The final element of the RTTC-inspired framework proposes to analyse the extent to which particular transport practices such as FFPT function as harbingers of an “urgent *utopia*” (Purcell, 2013, 2014), proposing a long-term and deep strategy that reaches beyond existing socio-spatial configurations. The policy of fare abolition to an extent function as a rupture in entrepreneurial totality, piercing a “hole in the whole” (Nawratek, 2012). In Tallinn, it functions as an exception that puts into the question the paid character of PT systems elsewhere in Estonia. Although top Estonian officials continue to criticise fare abolition as uneconomical or even unhealthy (err.ee, 2013). FFPT is to be expanded in summer 2018 onto regional bus services across the country—a step that was unthinkable only two years ago. Similarly, in Aubagne, free bus and tram service are exceptional in the context of Marseille-dominated MAMP. And yet, despite strong opposition from Marseille authorities, this exception is to survive at least until 2025, providing a clear example that alternatives to market-driven approaches to transport do exist. In Chengdu, the opening of (part of) the bus network to all users, regardless of their status as rural or urban residents, implicitly challenges the rural-urban apartheid that is embedded in the Chinese model of urban development, and does not operate at the speed and scale that are inherent in Chinese urbanism.

FFPT programmes in Aubagne, Tallinn and Chengdu could thus be seen as challenging the neoclassical-sustainable rationality, and the manner in which it defines transport-related problems and solutions. However, the policy of fare abolition appears to have a limited capacity in terms of ushering a profound transformation of society and space, contributing to a new socio-spatial order. Put simply, as there is no sufficient evidence to support the claim that “free transit [...] can also be an element in a broader vision to reorganize urban life and restructure the social order” (Kipfer, 2012, par. 7). Instead of singling a wide-ranging political strategy, FFPT seems to function as a singular policy.

This leads to the recognition of what is perhaps the biggest weakness of fare abolition: its relatively weak relation to environmental questions, and its lack of direct commitment to the challenge of reducing overall levels of mobility. On the one hand, as fare abolition induces a small shift from cars to PT, it could be understood having a positive impact on urban environment, by reducing car-related externalities such as pollution, noise and accidents—al-

though available data does not allow to analyse this issue in neither of the FFPT programmes analysed in this research. However, framing the question about the environmental aspect of FFPT only as part of the challenge of achieving a shift between available mode of transport, in particular from cars to public transport, would essentially follow the limits of sustainable perspectives on transport. Instead, I argue that this discussion should also incorporate a reflection on the possibility (if not necessity) of reducing overall mobility levels, across the urban territory and society. This would entail questioning mobility as a norm, and the resultant social and economic pressure on being “mobile”. However, it is questionable whether FFPT can play a role in advocating a shift from “the right to mobility”—a notion that is simplistic, and obfuscates major social and environmental consequences of unlimited and unconditional movement—towards the right to choose *not* to move. Rather, fare abolition may well function as a generator of new demand for mobility, encouraging movement rather than allowing to limit it. FFPT appears to have a limited capacity to alter the fundamental role of transport agendas in (re)producing capitalist social relations.

As demonstrated by the overview of the empirical evidence about FFPT, assuming a critical perspective on FFPT means formulating rather high expectations towards this policy. It is not only scrutinised against its performance in terms of mobility, but also analysed in terms of how it enters local power relations, how it interacts with PT passengers and workers, and how it contributes to long-term, utopian transformation of urban society and space. However, the fact that a particular FFPT programme does not have the capacity to fulfil all these expectations does not mean—in opposition to many arguments raised from the neoclassical and sustainable perspectives on transport—that it is not a feasible policy, and one that can be applied by many cities, beyond the three localities studied in the dissertation. To the contrary: the above-presented material should be read as an examination of how an existing practice can be implemented, and how it could be improved. Its goal, nonetheless, is not to determine whether FFPT is a “good” or “bad” policy, or to identify a its “ideal” features to be compiled into a policy template maximising its potential. Whether and how FFPT “works” (or not) to a great extent depends on the particular urban contexts in which it is applied, and by whom it is developed and used.

### **3. Reflecting on mobilising critical perspectives on urban transport with the right to the city**

In this dissertation, I chose not to consider “the right to the city” (RTTC) as a formulation of a right to any specific resource or space, granted to any specific social group or particular urban actor(s). Neither did I treat it as a call for appropriating a right to transport or mobility, which, as explained above, is not sufficiently transformative. Instead, I understand RTTC as a way of looking critically at existing urban (transport) phenomena, and of analysing the power relations that underpin them. I argue that this perspective offers practical tools for re-politicising transport scholarship and mobilising critical perspectives on urban transport. In other words—to refer back to the central research question that guided this dissertation—it demonstrates the various ways in which transport policies form part of urban political economy. The use of RTTC as a principal heuristic for critical analysis of transport phenomena allowed me to connect and embed transport scholarship with(in) critical urban studies, which meant engaging with both of these disciplines. First, my dissertation is directed towards transport scholars, as it conceptualises transport policy as an inherently urban object, which cannot be fully understood in detachment from power relations, regimes and coalitions by which it is conceived, social geographies in which it is inserted, and labour conditions which it entails. As demonstrated by the empirical part of the thesis, attempting to understand FFPT as a mere mobility instrument leads to inconclusive analyses according to which this policy is meaningless and irrational. For instance, as shown above, Tallinn’s fare abolition programme makes little sense unless it is viewed through the lens of inter-scalar dynamics between the municipal authorities, the suburban communities that compete with the city for human and financial capital, and the long-standing neoliberal agendas of the Estonian state. Therefore, I argue that it is by studying the political and spatial underpinning of a transport policy that its distinct motivations, qualities and effects can be effectively brought to light. As demonstrated in Chapter 6, central to this perspective is the concept of urban regime, which provides tools for understanding how an apparently technical domain of transport is laden with conflictual interests and politics, and acknowledges how state institutions at various scales act as an important mediator applying transport agendas as motor of urban development. As discussed in Chapter 7, these issues need to be incorporated in the reflection about the potential of transport policies in terms of assuming a “just” charac-

ter. The current debate about the conceptualisation of transport justice appears to be approaching transport in a mono-sectorial manner, in detachment from its interaction with other aspects and domains of urban development such as metropolitan governance and electoral politics. At the same time, it should engage more profoundly with various territorial and inter-scalar effects of transport policies. Finally, while the notion of transport justice helps to assess some of the outcomes produced by transport policies, it does not say much about how the process in which these policies are conceived, implemented and developed.<sup>2</sup>

Second, my dissertation aims at engaging with critical urban scholars to demonstrate the value of analysing transport policies as vehicles through which particular urban contexts can be analysed. As formulated by Trubina (2017), transport can act as a photographic “developer” that renders visible the interaction between urban actors, interests, power relations, and spatial dynamics. For example, analysing the way in which FFPT has been applied across the territory of CAPAE through cooperation among its municipalities helps to understand the political position of this territory vis-à-vis the policy of metropolitanisation conceived by the French state, and locally implemented by Marseille. Fare abolition allows CAPAE to resist agendas of state institutions, just as it enables Tallinn to juxtapose its policy with Estonia’s neoliberal agendas, and Chengdu municipality to mitigate the highly exclusive national *hukou* system. Consequently, studying FFPT reveals that transport is not (only) about transport: it is also, or perhaps first and foremost, about electoral strategies, metropolitan governance, urban regimes and elite coalitions, territorial competition or solidarity, processual and outcome-based transport justice, social and spatial inequalities, as well as agency and participation of PT passengers and labour conditions of PT workers.

Third, I argued that the critical perspective on urban transport inspired by RTTC is explicitly normative. It is not only about analysing transport phenomena, but also about changing them. It is underpinned by action: as “the idea of the right to the city does not arise primarily out of intellectual fascina-

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<sup>2</sup> The shortcomings of the notion of transport justice seem to be at least partly recognised and addressed by an ongoing debate about “mobility justice,” as evidenced by a series of thematic sessions held at the *Annual Meeting of the American Association of Geographers* in 2018. However, this concept still awaits to be theorised (Sheller, 2018).

tions and fads [but] primarily rises up from the streets” (Harvey, 2012, p. xiii), I therefore refer to Lefebvre to analyse and possibly to strengthen FFPT as one of the “practices and ideas that are already taking place in the city, practices and ideas that are inchoate, that have not yet come to full maturity, but are nevertheless being expressed” (Purcell, 2013: 23). In this sense, my empirical analysis of FFPT provides recommendations for structuring this debate by policy-makers, representatives of PT authorities and operators, and urban activists and inhabitants. It demonstrates that this debate is not effective when structured solely around transport-related questions. Alongside inquiring into whether fare abolition is financially feasible, this debate should begin by analysing how and by whom is the idea of switching to fare-free would be implemented, whose interests it helps to articulate, and whose interests it allows to challenge. Rather than conceptualise FFPT as policy having the capacity to attract car drivers to PT, the discussion about whether to abolish fares in a given locality should also focus on its spatial embedding and anticipated territorial impact, within and beyond particular administrative boundaries. The discussion about FFPT should therefore not only consider the potential of FFPT to contribute to improvement (or detriment) of quality of collective transport, but also reflect on how fare abolition is to affect the agency of passengers, and the conditions of PT workers. The RTTC-inspired framework proposed and applied throughout the dissertation helps to structure the debate about FFPT.

Herein lies the anticipated relevance of this dissertation for the transport debate in Brussels. Its ambition is to provide a framework for future debate about fare abolition, in which it intends to empower various local actors who have argued in favour of fare abolition (e.g. citizen associations) and whose interest this policy may support (PT workers, under-privileged PT passengers) vis-à-vis the local policy-makers who continue to follow and advance neoclassical-sustainable agendas, and therefore strongly oppose fare abolition. Providing the former with a variety of entry points, arguments and insights that highlight potential benefits and risks related to FFPT may facilitate their engagement in a constructive debate with the latter. Yet, in doing so, I feel that my role as researcher is not to bring concrete empirical evidence from one of the three FFPT sites discussed throughout this thesis, and to further apply or compare it with the particular urban transport context of Brussels. I have rejected this approach for two reasons. First, throughout my research, and in particular in my interaction with local actors in fieldwork

sites, I have become increasingly aware of my own positionally as an external expert, who may be tempted, asked or even required to enter the local debate by providing “rational” and “objective” knowledge about fare abolition. I believe that my contribution lies in providing tools for structuring such a debate. In doing so, I intend to empower local actors rather than become a powerful actor myself. Second, I fear that the empirical material presented in the thesis be reduced to brief vignettes, and be transformed into artefacts and symbols that are largely detached from the particular urban context in which they originated—a process that this dissertation explicitly opposes and attempts to address. In this sense, my intention is to show the complexity of FFPT, rather than offer simple recipes and fixes, backed by convincing stories, striking examples or other forms of persuasive evidence from various FFPT sites. My intention is to show that just as elsewhere, a potential shift to a fare-free regime in Brussels is by no means a simple issue. The apparently straightforward question about the cost of fare abolition does not only mean taking into account—on the one hand—higher costs related to lost income from tickets, increased demand and more personnel, and—on the other hand—lower expenses related to the maintenance of ticket systems and controls. Instead, the cost-benefit analysis of FFPT should be regarded as a highly spatial and political issue, involving a debate about what authorities—regional, but perhaps also federal and municipal—should contribute to FFPT—and making a statement in an ongoing conflict between different ways of moving around and living in the city, exercised by different inhabitants, across social classes.

Therefore, I feel encouraged to use Lefebvre’s theory as a catalyst allowing to re-embed transport questions within explicit political-economic urban considerations. The RTTC-inspired framework opposes “easy” alternatives, that is, policy practices that—despite their alleged “alternative” dimension—leave untouched the positions of those who dominate the capitalist production of space, or install dominant actors in a position to co-opt and legitimize some “innovations” from civil society, while repressing others. By revealing a number of explicitly political issues that underpin transport policies the framework is a practical tool for critically analysing and deconstructing various transport instruments, whether aligning themselves with neo-classical-sustainable hegemony, or proposing an “alternative” to it.

However, the proposed framework should not be read as a rigid checklist applicable to any transport policy and any urban context. Neither should it be interpreted as an attempt to design a ready-made model of an “alternative” or “critical” transport policy. Having said this, my initial intention behind operationalising the RTTC was to deduce a number of elements from Lefebvre’s work prior to conducting fieldwork, and to compile them into an analytical blueprint. This approach quickly appeared problematic. The premise of asking the same questions or seeking the same kind of yes-or-no answers across extremely different urban contexts—a Western European municipality with strong social democratic and participative traditions, a post-Socialist city permeated by market-oriented neoliberalisation that erodes bottom-up activities, and a mid-Chinese metropolis in which state-led capitalism is clad in communist symbols and narratives—turned out to be not only inefficient, but also quite naive. If Lefebvre was ever to agree to operationalise his broad theory, he would perhaps insist that it be transformed and used in a more inductive way, inspiring open-ended questions rather than imposing clear-cut criteria. What I have learned from working in the field is that applying the framework requires a high degree of reflexivity: some of its questions had to be omitted or even deleted, while new ones were added. Rather than focusing on the task of distinguishing cross-contextual features that would allow particular FFPT programmes to “score” a particularly high “benchmark,” the framework emphasises the fact that transport policies are multi-faceted, complex and locally “situated.” While its general heuristic continued to underpin my work wherever I went, whatever document I analysed and whoever I interviewed, the questions I studied nonetheless had to be adapted to the particular contexts of my research.

Herein I identify the essentially “critical” dimension of the proposed framework, which opens the pathway towards applying it to examine other policies and practices related to urban transport, through reflexive adaptation to the topics and contexts studied. For instead of seeking de-politicised “fixes” and “recipes” from elsewhere, it is built around an analysis of how different positions and stakes *in situ* condition transport policies and practices. The “situatedness” of any critique and its resultant “immobility” means that the “critical” character of academic knowledge about transport is strongly mediated by its capacity to challenge the dominant frame held by policy makers. Finally, the list of questions that together form a framework inspired by Lefebvre’s theory is by no means complete, and the proposed framework

is certainly not the only way in which a critical perspective on transport policies can be developed. Other pathways have been explored using concepts by Karl Polanyi (Rekhviashvili & Sgibnev, 2017), Gilles Deleuze (Bissell, 2016) or Jaques Rancière (Legacy, 2015), and connecting with these perspectives is important in order to avoid fragmentation of transport research into minute niches and conversations.

## **4. What is next? Agenda for future research.**

### **4.1. Exploring the global geography of FFPT**

Despite its attempt to provide a comprehensive view on the policy of fare abolition, this dissertation should be regarded as only one of the first steps towards understanding the phenomenon of FFPT, which requires more exploration, on a variety of scales, and in a variety of urban contexts.

First, further research could focus on deepening the analysis of global geography of FFPT to look beyond various regional types identified in Chapter 4, and to engage in a more fine-grained, comparative analysis combining mobility-related indicators and aspects related to the political, spatial and socio-economic contexts. This analysis could explore more patterns in the geographical distribution of FFPT, and help to identify whether FFPT is more likely to occur in specific urban or national conditions.

Second, similar work should be done on the level of particular countries. Poland and France require special attention as countries with the highest number of FFPT cases worldwide. Their FFPT landscape seems particularly variegated, as urban contexts for fare abolition are radically different, incorporating urban areas that are wealthy (e.g. Arcachon) and impoverished (Mława), suburban (Ząbki) and located in the core of urban agglomerations (Żory), industrial (Bełchatów) and post-industrial (Dunkirk). As important questions remain concerning the motivation behind each case and its outcome, there is urgency in terms of understanding them not only in terms of

their impact on local budgets and mobility patterns, but also with regard to their spatial and political embeddedness. Again, it is important to understand whether different types of FFPT can be associated with particular type(s) of political, social or spatial urban context(s). Similar questions should be asked about FFPT in Brazil and US, in the latter case building on Volinski's (2012) comprehensive report.

Third, there is also a need to continue investigating particular cases of FFPT, engaging in more qualitative work focused on the politics of the conception and implementation of FFPT, its potential impact on the “public” character of fare-free networks, social and spatial profile of its passengers, alongside inquiring into its outcome in terms of finance, mobility and social geography. This opens a pathway—largely unexplored in this dissertation—towards a gendered analysis of fare abolition. Among FFPT programmes that would be particularly interesting for further studies are Dunkirk (a post-industrial shrinking city has turned to FFPT as key element of large-scale urban renewal programme and a way of “reimagining” itself; see Briche [2017]), Żąbki (a suburban municipality that approaches fare abolition as a way of boosting its attractiveness vis-à-vis and within the Warsaw agglomeration), Maricá (the largest FFPT case in Brazil), and Changning (the largest case of fare abolition in Asia). Also, more should be known about discontinued FFPT programmes. An inquiry into why and how fares have been restored would be particularly relevant in the cases of Hasselt (the most renowned cases of FFPT alongside Tallinn) and Denver (the largest FFPT programme to have ever been implemented). Further research should also be conducted in Tallinn, where the municipal authorities begin to understand the importance of improving reliability of existing data collection methods, and are eager to engage in a longitudinal study of the outcome of FFPT in the city. This task is particularly relevant as from summer 2018 fare abolition will expand onto regional buses across Estonia. Even though inter-city trains and buses would remain paid, Estonian officials have already claimed that this would effectively make Estonia the first fare-free country in the world. Last but not least, it would be relevant to reflect upon the possibility of abolishing fares in the Brussels-Capital Region, calculating the financial and political cost of implementing such a policy. Similar calculations could be extended to a variety of cities, to explore the (im)possibility of abolishing fares in a variety of urban contexts.

Fourth, an important question to be placed on the agenda of future research into FFPT regard how the policy of fare abolition “travels” across localities and institutions. Studying the “mobility” of FFPT seems especially interesting as it constitutes an alleged “alternative” to the neoclassical-sustainable hegemony. While there is a body of work analysing the transfer and mobility of transport instrument aligned with this hegemony (Bray, Taylor, & Scrafton, 2011; Button, 1998; Jong & Geerlings, 2005; Lodge, 2003; Macário & Marques, 2008; Marsden & Stead, 2011; Wang, 2010)—for instance congestion charging (Attard & Enoch, 2011), urban freight measures (Timms, 2014), rail restructuring instruments (Lodge, 2003), or bus rapid transit (Wood, 2014a, 2014b)—important questions should be asked how an “alternative” policy such as FFPT travels: what spaces, networks and actors help to lubricate this process, what narratives and symbols are employed, and what practices are involved.

My preliminary work on this topic suggests a hypothesis of two circuits along which FFPT “travels”. On the one hand, a “formal” circuit with the Tallinn municipality as its node, focused on promotion of the policy rather than actual knowledge production and learning, regardless of ideological divergences across the policy network. On the other hand, an “informal” circuit in which activist organisations in Berlin, Stockholm and Toronto play key roles, which is built on particular political viewpoint on fare abolition, and is focused on learning about FFPT rather than promoting it. A parallel “informal” circuit exists in France, gathering activists from across the country, who are nonetheless disconnected from their peers elsewhere in Europe. However, these initial findings are yet to be verified.

Fifth, this highlights the issue of urban social movements as actors actively advocating and struggling for fare abolition. There is ongoing research into mobilisation of urban activists and inhabitants around the question of FFPT in Brazil (Maricato et al., 2013; Larrabure, 2016; Santana & Silva, 2013; Verlinghieri & Venturini, 2017), where at the moment of writing the last pages of this dissertation, Movimento Passo Livre (“free fare movement”) once again took the streets of Brazilian cities to halt a planned increase of PT fares. What makes these protests special is how they approach the question of PT price as a focal point for making a connection to broader urban struggles and agendas. As chanted by the protesters, “it is not just for 20 cents!” (Santana & Silva, 2013)—rather, “the increase of the ticket fare was only the straw that

broke the camel's back, opening a debate on wider requests for right to the city and spatial justice” (Verlinghieri & Venturini, 2017, p. 7). A somewhat comparable urban engagement could be identified in the philosophy of *plan-ka.nu* (2016)—whose name literally means “fare-dodge now”—a Stockholm activist group that promotes and enables riding PT for free, most notably by running a fund that covers ticket fines received by its members. Similar fare-dodging groups and funds are to be found in France—labelled “*mutualité sans tickets*” or “*mutualité fraudeurs*”—yet have not been subject of much scientific observation (Tessuto, 2013). While this thesis has not directly engaged with the struggles led by the FFPT-related movements and organisations, it indirectly supports their cause by providing a detailed reflection on the policy of fare abolition, deconstructing the oft-formulated critique against FFPT, but also highlighting its weaknesses.

#### **4.2. Developing the critical analysis of transport**

Equally important is the identification of pathways for further development and consolidation of critical perspectives on urban transport. While this dissertation focused on urban passenger transport, the critical view could well be expanded to embrace analyses of intra- and inter-national transport networks that move people as well as goods. In this way, the logics of international trade and globalised capitalism could be effectively questioned through investigating particular transport agendas, policies and infrastructural projects, looking at how they are inspired by global and relational narratives on the one hand, and how they are embedded in local power-relations on the other. This approach might help to understand and de-construct specific transport instruments (e.g. high-speed rail), policies (e.g. privatisation of inter-city bus and train services across Europe) and broad agendas (e.g. China’s Belt and Road Initiative). It seems particularly urgent to apply critical perspectives to study logistics, as there is no shortage of projects and strategies that await to be scrutinised and deconstructed, to expose and theorise how technologies of moving and trading goods help to sustain and reproduce capitalism across scales and spaces.

Perhaps a key challenge for further advancement of critical perspectives on transport—not least those building on the traditions of urban political economy—lies in actively engaging in the process of de-colonisation/

post-colonisation<sup>3</sup> of the field. As explained by Kwan & Schwanen (2016), this is particularly relevant not only because

“[i]t is in emerging economies and developing countries that both overall mobility levels and inequalities in mobilities are growing most rapidly and seen to cause difficult ethical questions about priorities. [...] Geographers should not only address such questions but also critically interrogate their framing and unpack the often taken-for-granted assumptions on which they are based [as] research on mobilities beyond the Global North is for the most part conducted by scholars born in or at least trained in the center—academic institutions in the Western world or heavily influenced by Western thought. Conversations on the geographies of mobility would be greatly enriched if they became more “world-ed” in the way urban theory is now starting to be” (p. 251).

The discussion on how to understand and practice decolonised/post-colonial perspectives on transport scholarship is ongoing, as evidenced by recent reviews of debates in transport geography and mobilities (Blanco et al., 2018; Kwan & Schwanen, 2016; Schwanen, 2017a, 2017b), and thematic sessions at the 2017 Annual International Conference of the Royal Geographical Society, and at the Annual Meeting of American Association of Geographers this year. What emerges from this conversation is that the task ahead reaches far beyond the challenge of “de-centring” geographical scholarship and questioning the Western or Anglo-American domination in (transport) geography (Aalbers & Rossi, 2009; Bajerski, 2010; Garcia-Ramon, 2004), as “so far this trend has reinforced the application of ‘western’ concepts, tools and understandings about transport to historically understudied geographical contexts” (Schwanen, 2017a, p. 361).

Instead, the endeavour of de/post-colonising transport seems to involve several inter-related perspectives. First, in strong connection to the critical perspective developed in this dissertation, it entails deconstructing the technical rationality behind transport. This opens the way to study the way that transport knowledge is produced, and to investigate the ideological and epistemological roots of neoclassical and sustainable perspectives, looking where, how and by whom are their cores (re-)produced. This perspective further emphasises that the development of transport agendas, policies and

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<sup>3</sup> As explained by Mignolo (2011), while the two perspectives are both focused on deconstructing the various outcomes of colonialism, important differences exist between them in terms of their (geographical) origins and mission statements.

infrastructure—whether in the global North or South—is an inherently political process. This means breaking and questioning the “rationality” that allegedly underpins “efficient,” and “successful” development of “modern” transport networks—concepts that bring an essentially Northern and Western rationality—to consider the possibility for more flexible, informal and even “irrational” ways of planning and practicing transport. Instead, non-academic perspectives on transport research can be valued, thus recognising that the academe can act as one of the strongest harbingers of colonialism. At the same time, this involves highlighting the inherently urban character of transport policies and projects developed in cities, and demonstrating that transport development not only is connected to broader urban agendas, but actually its implementation has little to do with addressing mobility problems. Rather, transport can be analysed as an inherent element of strategies geared towards urban beautification and renewal, policy boosterism and marketing, entrepreneurial rent-seeking and land speculation, urban revanchism and gentrification.

Second, de/post-colonising transport signals the intention to deconstruct the “formality” of transport by attention to its less formalised and centralised forms, which are by no means less organised. As a significant part of the global population continues to rely on informal transport, which is a common phenomenon across a variety of geographical contexts, and its new forms and practices continue to emerge, scholarly literature about it appears to suffer from a series of deficiencies. De/post-colonising this literature involves breaking with descriptive and formalist conceptualisation of informality that is detached from existing debates on informal economic practices (Golub, Balassiano, Araújo, & Ferreira, 2009; Kumar, Singh, Ghate, Pal, & Wilson, 2016), and has failed to engage with historical, social, economic and geographical situatedness of informal transport practices. It further challenges the predominant perspective on informal transport as phenomenon that exists primarily in the global South (Cervero, 2000; Cervero & Golub, 2007; Ference, 2016; Spooner, 2011), implying that similar practices are rare to be found in the global North. It also questions the predominantly normative to transport informality approach, according to which informal transport is under-invested and under-developed (Finn & Mulley, 2011; Finn, 2012), and thereby awaits a transformation to formal transport systems through different forms of technical upgrading, increased regulation and growth (Gwilliam, 2001; Pojani & Stead, 2015). Instead, an updated typology of in-

formal transport practices should include increasingly popular models allegedly inspired by the principles of “shared” or “circular” economy. Services offered by companies such as Uber or Lyft requires a comprehensive and solid critique that looks through starry-eyed views of their apparently technologically innovative and futuristic vision of on-demand mobility, which seems to be strikingly aligned with seemingly less “developed” and “advanced” informal transport practices in the global South. Again, this involves relating the de-colonised perspective on informal transport with political economy questions that are central to critical transport scholars, for instance regarding the politics and power relations that undergird the process of conceptualising and implementing particular informal transport solutions, the ownership structure on which they hinge, the working conditions they involve, and the role of passengers they envision, and the spatial geography they incorporate.

Third, following a more “classic” understanding of de/post-colonisation, critical perspectives on transport should be more engaged in terms of deconstructing the Western and Northern view(s) on transport by looking away from the geographical centres of knowledge in the Euro-American mainstream. Instead, they could look at transport not only *in* but also *from* the South, and raise questions about mobility of transport policy from South to North, and from South to South. Accordingly, this perspective entails bringing examples that do not belong to the catalogue of global “celebrity” cities acting as playgrounds for “best practices” and “policies-that-work.” Instead, a de-colonised critical approach to transport values the experiences of “ordinary” cities (Robinson, 2002, 2011, 2016), which are rarely included in debates or put on map by transport geographers, and do not have the ambition to act as outposts of “cutting-edge” policy models, exchanging knowledge along paths much less travelled by transport “fixes” and “recipes.”

In the light of thus conceptualised research agenda, this thesis to some extent has incorporated a decolonised perspective. On the one hand, it has focused on an allegedly “nonsensical” policy of FFPT as a measure that challenges the “rational” thinking about transport, and demonstrates important limitations of purely technical and mobility-related approaches to analysing urban transport policies. In that sense, it has looked away from shiny examples of high-tech innovations, and focuses on a much less spectacular—at least from the technical point of view—socio-political innovation of fare abo-

lition. It has further brought empirical material from three “ordinary cities” (Aubagne, Tallinn and Chengdu), each of which rarely appears on maps and in geographical debates. This perhaps suggests that analysing FFPT means engaging with an “alternative” circuit of transport-related knowledge, which is produced far from “global” cities. On the other hand, however, the great majority of theoretical concepts and literatures upon which it has built are essentially Western, and its guiding theory was originally conceived by a Frenchman. A story of fare abolition is yet to be written from genuinely decolonised/post-colonial perspective.

Thus, while the ambition of this dissertation has been to provide answers to several epistemological questions about transport scholarship, and empirical questions about the policy of fare abolition, it concludes by formulating a series of new questions. Both the task of understanding why, how and where fare abolition programmes emerge, and the challenge of strengthening and practicing critical inquiry into transport, are far from complete. This work is but the first attempt to advance research in new, and hopefully exciting directions, and to embark on scientific journeys in which Henri Lefebvre can be an inspiring companion.

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## CHAPTER 8: CONCLUSION

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## Appendix

# Appendix

## Anonymised list of interviewees

	Function
<b>Aubagne</b>	
	Member of the Council of Communauté d'agglomération du pays d'Aubagne et de l'Étoile (CAPAE)
	Member of the Council of CAPAE
	Member of the Council of CAPAE
	Former member of the Council of CAPAE
	Former member of the Council of CAPAE
	Official at the Aubagne's mayor's office
	Official at the Aubagne's mayor's office
	Former mayor of Aubagne
	Official at the municipality of Bouilladisse
	Official at the municipality of Roquevaire
	Member of the city council of Aubagne
	Member of the city council of Aubagne
	Member of the city council of Aubagne
	Official at the Transport Department of CAPAE
	Official at the Transport Department of CAPAE
	Official at the Transport Department of CAPAE
	Official at the public transport operator of CAPAE (TransDev)
	Official at the public transport operator of CAPAE (TransDev)
	Low-rank employee of the public transport operator of CAPAE (TransDev)
	Low-rank employee of the public transport operator of CAPAE (TransDev)
	Low-rank employee of the public transport operator of CAPAE (TransDev)
	Low-rank employee of the public transport operator of CAPAE (TransDev)
	Low-rank employee of the public transport operator of CAPAE (TransDev)
	Member of the local chamber of commerce
	Member of local trade union
	Member of local trade union

## APPENDIX

	<b>Function</b>
	Member of local citizen association

### **Tallinn**

	Official at Tallinn City Office
	Official at Tallinn City Office
	Official at Tallinn City Office
	Former official at the Tallinn City Office
	Official at the at Tallinn's municipal transport department
	Official at the at Tallinn's municipal transport department
	Member of the board of Tallinn's public transport operator (Tallinna Linnatranspordi AS)
	Low-rank employee of Tallinn's public transport operator (Tallinna Linnatranspordi AS)
	Low-rank employee Tallinn's public transport operator (Tallinna Linnatranspordi AS)
	Low-rank employee Tallinn's public transport operator (Tallinna Linnatranspordi AS)
	Low-rank employee Tallinn's public transport operator (Tallinna Linnatranspordi AS)
	Member of the city council of Tallinn
	Member of the city council of Tallinn
	Member of the city council of Tallinn
	Official at the Harju Country Government
	Official at the Harju Country Government
	Official at the Harju county public transport administration
	Official at Estonia's Ministry of Economic Affairs and Communications
	Transport and mobility researcher at Stockholm Environment Institute
	Transport and mobility researcher at Tallinn University

## APPENDIX

<b>Function</b>
Transport and mobility researcher at Tallinn University of Technology
Member of local citizen association
Member of local citizen association
Member of local citizen association
Official at the municipality of Rae
Official at the municipality of Rae
Official at the municipality of Saku
Official at the municipality of Viimsi
Official at the municipality of Kose
Official at the municipality of Radisiki

### **Chengdu**

Member of the board of Chengdu's public bus operator (Chengdu Bus Group)
Former member of the board of Chengdu's public bus operator (Chengdu Bus Group)
Official at of Chengdus' public bus operator (Chengdu Bus Group)
Member of the committee of public transport passengers
Member of the committee of public transport passengers and of Chengdu People's Congress
Member of the committee of public transport passengers and of Chengdu People's Congress
Transport researcher at Chengdu Academy of Social Sciences
Transport and mobility researcher at the Sichuan University

### **Brussels**

Former member of the Government of the BCR
Cabinet member of one of the BCR ministries
Member of the board of directors of Bruxelles Mobilité, the administration of the Brussels-Capital Region responsible for transport and mobility
Official at Bruxelles Mobilité
Official at Bruxelles Mobilité
Member of the board of directors at one of the regional public transport operators
Member of the board of directors at one of the regional public transport operators

APPENDIX

<b>Function</b>
Official responsible for mobility policy in one of 19 municipalities of the BCR
Official responsible for mobility policy in one of 19 municipalities of the BCR
Official responsible for mobility policy in one of 19 municipalities of the BCR
Official responsible for mobility policy in one of 19 municipalities of the BCR
Official at Beliris, federal agency co-financing transport and mobility projects in the BCR.
Mobility expert at one of the local Dutch-speaking universities
Mobility expert at one of the local French-speaking universities
Mobility expert at one of the local French-speaking universities
Urban planner at one of the local French-speaking universities
Mobility expert at one of the local Dutch-speaking citizen associations
Mobility expert at one of the local French-speaking citizen associations
Mobility expert at one of the local French-speaking citizen associations

