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### Moving past sustainable transport studies:

### Towards a critical perspective on urban transport

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#### **Abstract**

This article introduces a virtual special issue that carries the same title. We open our editorial by observing that the contemporary transport debate continues to find strong inspiration in the notion of "sustainable" development, which strongly resonates among academics and practitioners alike. While placing important environmental issues on the agenda, sustainable approaches to urban transport exhibit a number of serious limitations, as, as it has insufficiently engaged with diverse social, political and economic dynamics that shape how transport is planned, regulated, organised, practiced and contested in urban contexts.

To respond to this gap, we propose to develop an emerging "critical" perspective on urban transport, which considers it to be socially constructed and contested, underpinned by structural power dynamics, class relations, gender and patriarchy, ethnicity and race. Building on critical urban theory, we argue that being critical about urban transport involves approaching it as a phenomenon that reproduces complex social and spatial processes, and acts as a crucial component of capitalism. On the one hand, this means analysing transport policy, practice and infrastructure through the lens of capitalist dynamics observed in particular urban contexts. On the other, it entails exploring the complexity of processes, institutions and interests that make up a city through its transport.

While critical research on transport and mobility may be on the rise, it still constitutes a rather marginal research area. Therefore, the objective of the virtual special issue is to advance the critical agenda of transport research. The diverse contributions to this virtual special issue offer a number of avenues for thinking critically with and through urban transport as part and parcel of capitalism. Our authors discuss theoretical and methodological frameworks for studying transport, and offer empirical analyses of specific policies and practices, inquiring into their sociospatial impact, political-economic embeddedness and the power relations and regulatory frameworks by which they are shaped.

What emerges from this anthology is that there is no singular or universal way of being critical about urban transport. Unravelling and analysing power and ideology underpinned and reproduced by transport in urban settings is by no means an exercise that hinges on a particular theoretical lens or focuses on a specific social group or factor. As this endayour is far from complete, we outline several

directions for further critical research. Notably, we suggest to diversify spaces and scales of analysis by exploring long-distance travel, to diversify research objects by analysing freight and logistics. We also note that future research could consider diversifying social theories and epistemologies through which transport is perceived, to contribute to a decolonial turn in transport studies.

### **Keywords:**

Urban; Transport; Sustainability; Critical urban theory; Capitalism

# 1. What are sustainable approaches to transport, and why are they problematic?

The contemporary transport debate continues to find strong inspiration in the notion of "sustainable" development, which strongly resonates among academics and practitioners alike. It embraces heterogeneous epistemological positions, notably the tension between "ecological modernisation" of capitalism (Barry, 2003) on the one hand, and "radical ecocentrism" that implies an adaptation of existing socio-economic structures on the other (Bailey & Wilson, 2009). Nonetheless, "sustainable" approaches to transport share key ideas and areas of research. The conceptualisation of transport sustainability (Banister, 2008; Hickman et al., 2013; Low & Gleeson, 2003) emphasises the need to reduce the environmental impact of mobility in the light of ongoing climate change (Schwanen et al., 2011), notably through creating stronger links between land-use and transport policy, reducing travel needs, and challenging ever-increasing dependence on automobility and aviation. Achieving sustainability thus hinges on profound socio-technological transitions (Geels, 2012), in which cities and their agglomerations should play a central role. Within and beyond academia, this perspective has successfully focused the transport debate on a series of vital environmental issues. However, together with the contributors to this virtual special issue (VSI), we argue it has insufficiently engaged with diverse social, political and economic dynamics that shape how transport is planned, regulated, organised, practiced and contested in urban contexts.

To respond to this gap, we propose to develop an emerging "critical" perspective on urban transport. By "critical" we do not refer to the everyday understanding of the term as an expression of "adverse or disapproving comments or judgements", or a sign of "incorporating a detailed and scholarly analysis and commentary". Many scholars of sustainable transport have undoubtedly practiced what is commonly referred to as "critical thinking", an action "involving the objective analysis and evaluation of an issue in order to form a judgement." Instead,

<sup>1</sup> Excerpts of the definition of the word "critical" and "critical thinking" from Oxford English Dictionary, accessed at <a href="https://www.lexico.com/">https://www.lexico.com/</a>, on 28 September 2020.

we take "critical" to denote an engagement with analysis of structural power dynamics, class relations, gender and patriarchy, ethnicity and race. Moreover, following a vast strand of literature advancing "critical urban theory" (Brenner, 2009), we consider these notions to be socially constructed and contested.

Before discussing "critical" arguments and claims over urban transport, let us briefly explain what we identify as sustainable transport studies. The latter have been advanced time and again in the pages of Transportation Research Part A: Policy and Practice (hereafter TR-A). On several occasions did the journal host discussions on theorising sustainable transport (Holden et al., 2013; Nijkamp, 1994), referring back to the report by the Brundtland Commission (1987) that introduced the very notion of "sustainable development". Many contributors to TR-A have expressed the need to promote urban density, "proximity" (Lindsey et al., 2010; Marquet & Miralles-Guasch, 2014), and "mixity" (Soria-Lara et al., 2016) of functions and land uses, as a way of reducing car usage (Kent, 2014; Rogan et al., 2011; Scarinci et al., 2017). As in various other transport journals (including *Transport Policy*, Journal of Transport Geography and Transportation Research Part D: Transport and Environment), this framing has inspired studies about diverse principles and practices of sustainable transport planning (Attard, 2012; Pternea et al., 2015), notably by facilitating transit-oriented development (Ibraeva et al., 2020) and drawing up sustainable mobility plans (Guzman et al., 2020). It has further led to an ever-growing body of work on particular sustainable policy and planning tools, from imposing vehicle taxation schemes (Fridstrøm & Østli, 2017; Rogan et al., 2011) and congestion charging programmes (Li et al., 2019) to designing "car-free" districts (Scarinci et al., 2017) and "complete streets" (Marleau Donais et al., 2019). A great deal of articles have looked at specific sustainable transport modes that facilitate and accommodate a shift away from the car. These have included "active" modes such as cycling (Caulfield, 2014; Rérat, 2019) and walking (Marquet & Miralles-Guasch, 2014), electric bicycles (Cairns et al., 2017; X. Lin et al., 2017; Wells & Lin, 2015) and electric cars (Adnan et al., 2017; Biresselioglu et al., 2018), shared vehicles (Campbell & Brakewood, 2017; Frade & Ribeiro, 2015; Scarinci et al., 2017), and various collective transport innovations such as bus rapid transit (Merkert et al., 2017) and mobility as a service (Wong et al., 2020). Notably, some contributors to this debate have further emphasised the importance of sticking the balance between economic goals and social sustainability, whether expressed in terms of equity (Chen et al., 2019; Linovski et al., 2018; Zhou et al., 2019), inclusion (Lucas, 2006; Lucas et al., 2016), or accessibility (El-Geneidy et al., 2016).

However, while placing important environmental issues on the agenda, sustainable approaches to urban transport exhibit a number of serious limitations (Boussauw & Vanoutrive, 2017). Despite

exploring socio-political factors that shape mobility strategies and patterns, and thus departing from neoclassical transport engineering and econometrics, they continue to envision transport as a predominantly technical and "rational" field, underpinned by a drive towards efficiency and utility. Technical tools such as cost-benefit analysis have been criticised for their limited capacity to grasp the complexity and the very socio-political nature of environmental questions (Awasthi et al., 2018; Soria-Lara & Banister, 2018). In response, sustainable transport researchers have developed alternative analytical frameworks, such as multi-actor multi-criteria analysis (Macharis et al., 2009) and competence-based multi-criteria analysis (te Boveldt et al., 2018). These techniques are perhaps more transparent than their predecessors, can inspire much-needed reflection on the weight assigned to each criterion used in transport modelling, and have better capacity to exhibit tensions and conflicting views among diverse stakeholders and social groups. However, they seldom allow to capture, understand and address the structural causes behind social and environmental unsustainability (van Wee, 2012). Instead, sustainable perspectives on transport often exhibit strong technological optimism. They tend to focus on technical innovations such as improvements to vehicle performance, fuel efficiency and alternative propulsion, while paying much less attention to political measures that could challenge the un-sustainable status quo (as criticised by Baeten, 2000; Timms et al., 2014). This approach is often accompanied by the belief that behavioural change is crucial for achieving a transition to sustainable transport systems. In turn, it essentially upholds a neoclassical view that as individual behaviour is inherently rational (Kębłowski & Bassens, 2018), it can be modelled (Etminani-Ghasrodashti & Ardeshiri, 2015) and transformed (Bueno et al., 2017; Cairns et al., 2017; Gehlert et al., 2013; X. Lin et al., 2017; Su et al., 2010).

In urban contexts, scholars working on sustainable transport often envision it as "an essential element in city viability, vibrancy, and vitality" (Banister, 2011, p. 953). Indeed, it would be unreasonable to argue against planning cities that are more compact, whose inhabitants rely less on cars and can walk and cycle safely and comfortably, enjoy an unpolluted urban environment and thus better health, and participate in a society that is both cohesive and inclusive. However, we argue that this vision of overall improvement to "life quality" and urban "liveability" (Appleyard, 1980; Garrick & Kuhnimhof, 2000; Pacione, 1990) tends to obfuscate urban dynamics in which it enters, and which it inevitably affects. Sustainable transport scholars seldom analyse the socio-spatial distribution of transport-related costs and benefits (Martens et al., 2012). These include pressures on the housing market, spatial and social divides that sustainable policies may (re)produce, stratification of classes and territories they may embrace, and the political mechanisms and choices that may underpin them. Symptomatically, the particularly strong attention that the concept of sustainable transport attributes to individual behaviour can lead to a highly normative and moralistic hierarchy. Certain practices and

lifestyles (such as walking, cycling, living in dense and central urban areas) are praised, while others (e.g. driving, flying, living in suburban or remote areas) are increasingly considered "bad" from the environmental standpoint, even if in many societies in the global North they constitute a socioeconomic norm, supported by both state and market institutions (Reigner, 2016). Furthermore, such an approach remains blind to numerous structural constraints, for instance regarding the limited options among the working-class to inhabit central and dense urban neighbourhoods (Nijman & Wei, 2020; Paton, 2016; Slater, 2012), or to find employment in areas that are accessible by sustainable transport modes such as public transport, rather than by car (Fransen et al., 2019; Reigner et al., 2013).

Finally, we argue that as this debate focuses strongly on exploring technological and behavioural solutions to the problem of un-sustainability in transport, it pays much less attention to exploring the processes of policy-making, from setting broad mobility agendas to deciding on investments in specific infrastructure. As a result, it tends to reduce the complexity of arriving to transport strategies and policies to a series of supposedly matter-of-fact procedures and tasks. In turn, it obfuscates fundamentally political choices regarding who is set to benefit and lose from a transition to a more sustainable society, who is included in its conception and application, and who experiences social and political exclusion related to transport. The question of who benefits and who loses from transport policies is largely neglected, insufficiently explored, and commonly "depoliticised" by the narrative of sustainability.

Put simply, we argue that sustainable approaches to transport insufficiently engage with diverse social, political and economic dynamics that shape urban transport, offering a narrow frame of reference for understanding the complexity of the power relations underpinning urban mobility. Therefore, we propose to turn our attention to what we frame as "critical" approaches, which we believe have a strong capacity for broadening the scope of transport studies.

### 2. Critical perspectives on urban transport

Various perspectives have developed separately from the paradigm of sustainable transport, either in parallel, or in reaction to it. One pathway for exploring these dynamics is articulated by scholars working within the "new mobilities paradigm", formulated by Mimi Sheller and John Urry (2006). Elevating "mobilities" as a concept that is central to understanding contemporary societies, this field of research has stimulated a much needed reflection on the condition of the transport debate, offering a trans-disciplinary exploration of "representations and meanings of mobility" (Cresswell, 2010, p. 19) as well as its sensations, experiences, practices and "micro-politics" (Bissell, 2016). However, its engagement with structural power dynamics, class relations, gender and race — although these

notions have visibly entered the mobilities vocabulary (Sheller, 2018) — is usually misleading. Although "mobilities" often claim to engage with a critical analysis that unpacks power relations reproducing racial, gendered, patriarchal and ableist prejudice and exclusion, these structures are often described rather than analysed and addressed.

While we do not intend to create cleavages between disciplines, theoretical standpoints and epistemological traditions (Kwan & Schwanen, 2016; Schwanen, 2017), we nonetheless argue that explorations of the relationship between transport and cities may benefit from engaging with a strand of theorisations and approaches that build on critical urban theory. Following Brenner (2009), we understand critical urban theory as a perspective that

"rather than affirming the current condition of cities as the expression of transhistorical laws of social organisation, bureaucratic rationality or economic efficiency, [...] 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" (198).

Accordingly, being critical about urban transport involves "the critique of ideology [...] and the critique of power, inequality, injustice and exploitation" (198) that are part and parcel of capitalism.

A number of important scientific traditions do incorporate critical thinking into research about urban transport. Critical perspectives on transport have built on strong feminist traditions of exposing power relations and norms underpinning mobility, not least related to gender (Hanson, 2006; Hanson & Pratt, 1988; Kwan, 1999; Law, 1999). Marxist geographers have established a strong tradition of exploring the tension between infrastructural development and socio-spatial distribution of population and services (Harvey, 1973; Smith, 1984; Soja, 2010). This line of thought underpinned classic research into transport-induced inclusion and exclusion (Hine, 2003; Kenyon et al., 2002; Lucas, 2012), accessibility (Farrington, 2007; J. Preston & Rajé, 2007) and inequality (Ahmed et al., 2008; cf. Lucas et al., 2019; Pereira et al., 2017). Contemporary debates in critical urban studies have framed transport as a crucial component of urbanised capitalism. Analysed from this perspective, transport infrastructure often functions as a "spatial fix" (Harvey, 2001) that helps to organise capital accumulation, advancing elite entrepreneurial agendas, and consolidating urban regimes (Enright, 2016). Beyond its apparent embedding in agendas promoting social and environmental sustainability, transport infrastructure constitutes as a crucial asset employed in strategies geared towards rent valorisation and gentrification (J.-J. Lin & Chung, 2017; Lung-Amam et al., 2019), which reproduce uneven urban development (Enright, 2016), and advance politics of class (Addie, 2013; Farmer, 2011), race (Golub et al., 2013; V. Preston & McLafferty, 2016; Steinbach et al., 2011), and

patriarchy (Levy, 2013). Critical scholars have demonstrated how across strikingly diverse cities, urban regimes hide and legitimize these logics by applying the discourse of sustainability, framing infrastructural investment as a largely technical and rational response to the problems of congestion or low quality of public space. Instead, approached critically, transport is an essentially political issue of distributing social and spatial benefits and costs of urban development. As explored by political and administrative sciences, transport agendas advanced by actors and institutions such as urban governments, public transport operators and private businesses should be viewed as unitary and uniform. Rather, they are imbricated in multi-level governance across scales and administrative jurisdictions, involving internal tensions and contradictions, and hinging on uneven distribution of agency (Veeneman & Mulley, 2018). Thus, transport reflects and articulates social conflicts, and is central to both the (re)production of urbanised capitalism and resistance to it. A growing literature has therefore looked at bottom-up movements contesting transport agendas and advancing alternative modes of organising and producing mobility (Castañeda, 2020; Enright, 2019; Verlinghieri & Venturini, 2017). In parallel, critical scholars have emphasised the relevance of looking at transport through the lens of labour (Malin & Chandler, 2017; Rekhviashvili & Sgibnev, 2018), emphasising the agency of both transport users and workers.

Thus, being critical about urban transport means approaching it as a phenomenon that reproduces complex social and spatial processes, acting as a playground of political and economic institutions, and a stage for private and public interests that represent conflicting interests and claims over urban society and space. In this perspective, transport becomes a reflection of exploitation and exclusion related to class, gender, race or age. Crucially, it provides a framework for dissociating spaces of economic production from those of consumption, allowing capitalist interests to extract maximum profit from the workforce. Consequently, a critical perspective on transport entails, on the one hand, analysing transport policy, practice and infrastructure through the lens of capitalist dynamics observed in a particular urban context. On the other, this approach opens diverse avenues for exploring the complexity of processes, institutions and interests that make up a city through its transport. Crucially, this perspective departs from analysing and juxtaposing specific transport modes (e.g. airplanes and private cars against public transport) and related lifestyles (e.g. mass tourism, suburban life and work against cycling and walking), and instead demonstrates their role in sustaining socio-economic structures that enable the capitalist mode of producing urban space and society. Therefore, in sum, being critical about transport means analysing it as a key component of capitalism.

Some of these issues have indeed been discussed by the contributors to this journal, as they explored socio-economic indicators and factors behind sustainable planning tools (Liu & Gui, 2016; Wang &

Zhao, 2017), questioned their alleged environmental and social contributions (Bahamonde-Birke, 2020; Lyons, 2018), inquired into transport poverty (Lucas et al., 2018; Sanchez, 2008), or advocated for transport solutions and approaches that are sensitive to issues of race and gender (Brown, 2020; Giuliano, 2003), and social justice (Rowangould et al., 2016). Nonetheless, searching TR-A for terms such as "capitalism" or "capitalist", "neoliberalism", "feminism", and "race" generates very few results (see *Table 1*), with only two terms ("equity" or "equality", and "gender") present in more than 2% of results<sup>2</sup>. These keywords are proportionally even less visible when looking at a wide range of international Anglophone transport and mobility journals available in Scopus. In other words, TR-A appears to accommodate critical perspectives slightly more often that the average for transport and mobility journals listed in Scopus. However, as these critical keywords are systematically more frequent in the broad area of "Social Sciences" (Table 1), the field of transport and mobility appears to be generally unconcerned by a wide range of critical issues. We interpret these results as coherent with earlier efforts at mapping transport (geography) research (Liu and Gui, 2016), and confirming our earlier observation (Kębłowski & Bassens, 2018) that albeit the field is increasingly diverse (Schwanen, 2016), critical perspectives on transport continue to be fragmented and fuzzy. Put simply, while critical research on transport and mobility may be on the rise, it still constitutes a rather marginal research area.

Terms included in title, abstract or keywords	Transportation Research Part A: Policy and Practice <sup>1</sup>	Transport and mobility journals <sup>2</sup>	Social sciences <sup>3</sup>
All publications (no selected terms)	3,044 (100%)	178,090 (100%)	6,346,564 (100%)
Capitalis*	5 (0.16%)	78 (0.04%)	37,094 (0.58%)
Equity or Equality	85 (2.79%)	1,369 (0.77%)	61,748 (0.97%)
Ethnic*	10 (0.33%)	200 (0.11%)	108,095 (1.70%)
Feminis*	0 (0.00%)	19 (0.01%)	45,208 (0.71%)
Gender	67 (2.20%)	1,572 (0.88%)	189,784 (2.99%)
Inequalit*	31 (1.02%)	933 (0.52%)	63,038 (0.99%)
Labour or Labor	51 (1.68%)	1,201 (0.67%)	122,178 (1.93%)
Neoliberal* or Neo-liberal*	3 (0.10%)	36 (0.02%)	32,530 (0.51%)
Race or Racial	4 (0.13%)	255 (0.14%)	99,365 (1.57%)
Social inequalit*	1 (0.03%)	33 (0.02%)	6,888 (0.11%)

<sup>&</sup>lt;sup>1</sup> Excluding Transportation Research Part A: General, the predecessor to TR-A.

Table 1. A comparison of publications that include selected "critical" terms, as listed in Scopus. Search performed on 21st January 2021

<sup>&</sup>lt;sup>2</sup> Please note that Scopus does not allow searches by academic fields. Therefore, to identify transport-related journals, when performing the search we selected all journal names that contain "transport\*", and manually added Mobilities and Travel Behaviour and Society to the journal list. Applied Mobilities is not captured by Scopus.

<sup>&</sup>lt;sup>3</sup> According to a "subject area" identified by Scopus.

<sup>&</sup>lt;sup>2</sup> The search was conducted after the publication of all the VSI papers in the journal.

### 3. Contributions to the virtual special issue

Herein lies the key objective of this special issue: to advance the critical agenda of transport research. It gathers critical contributions that discuss theoretical and methodological frameworks for studying transport, and offer empirical analyses of specific sustainable transport policies, infrastructures, and practices, inquiring into their socio-spatial impact, political-economic embeddedness and the power relations and regulatory framework by which they are shaped.

We open the special issue with two papers exploring theoretical framings for studying transport and mobility. Inspired by critical social theory, Verlinghieri (2020) proposes the concept of resourcefulness as complementary to the notion of transport sustainability, and resourcefulness-based worldview as a way of reframing the interaction between society, politics, the economy, and the environment. These theoretical reflections are illustrated by empirical examples of "alternative" transport projects in Brazil and Italy. Vanoutrive & Cooper (2019) debate Karel Martens' (2017) conceptualisation of transport justice, developed through the issue of accessibility levels across social groups, and centres upon a moral dimension of transport policies. Based on two case studies—transport justice movement in California, and the so-called "basic accessibility" debate in Flanders—the authors discuss Martens's theory through the lens of paternalism and production of transport services. The paper has triggered a comment from Martens himself (2020), to which the authors have responded (Vanoutrive & Cooper, 2020).

A further set of papers offer critical explorations of specific concepts, policies and practices that carry the label of transport sustainability. Reigner & Brenac (2019) look at transport policies implemented across France under the umbrella terms of "sustainability" and "safety", analysing how these concepts are narrated and applied in the framework of sustainable urban mobility plans. The authors demonstrate how these plans involve social and spatial hierarchies, emphasise individual responsibility and rationality of transport users, and hinge on profound depoliticization of transport issues. Groth (2019) analyses the potential contribution of smart mobility solutions to multimodality in the German Rhine-Main region, and demonstrates how the emphasis on modal shift may generate transport policies that exclude many transport user groups. The author further shows that the development of transport services accessible via smartphone applications or the internet may widen the gap between users who have access to multiple versus few transport modes. Consequently, spatially unequal levels of access to shared mobility services become exacerbated. Groth advocates replacing the policy objective of 'multimodality' with 'multi-optionality', focusing on the user's ability to choose from available transport options.

McArthur and her colleagues (2019) consider the question of time and labour in critical reflections on transport and mobility. Looking at London, they explore how public transport policies developed to support the night-time economy have focused predominantly on economic development and consumption, entertainment and leisure. Meanwhile, the needs of night workers have been neglected even though they face both spatial and temporal barriers imposed by transport routes and timetables. As a result, transport equity has not been improved, neither in spatial nor in temporal terms. Hansson (2020) challenges techno-deterministic approaches to transport infrastructure planning, looking at visual representations of future road construction projects. Building on science and technology studies, the author shows that actors with clearly defined interests may strengthen their position by strategic use of communication and visualisation techniques, assigning crucial roles to artifacts. Discussing nine cases located in Norway, Hansson examines to what extent the number of vehicles here considered as artifacts employed in the communication process—depicted in the project visualisations match the estimates of future traffic volumes as published in the accompanying impact assessments. Instead of making decision-making about transport more transparent, visualisations support the narrative of sustainability, and alter the perception of the anticipated impact of transport projects.

Médard de Chardon (2019) unravels political economic contradictions of bicycle sharing systems (BSS). An oft-cited instrument of "sustainable" transport, BSS enjoy seemingly undisputed "success" in terms of promoting urban "liveability". However, the paper demonstrates how despite being narrated as a "sustainable" policy, BSS offers few solutions to mobility problems, and achieves little in terms of promoting sustainable transport. Instead, its key *raison d'être* lies in the willingness of urban elites to invest in BSS as a way of generating political and economic benefits, while bringing few mobility-related gains to local residents. This part of the virtual special issue is concluded by Sgibnev & Rekhviashvili (2020), who offer a critical view of the phenomenon of digitalisation, as it is rapidly embraced by informal and low-tech transport practices in post-Soviet cities. The authors discuss how digitalisation is promoted by local authorities to foster urban "sustainability", how it reflects local inequalities and injustices, notably allowing business elites to exclude small transport actors and providers from the market.

With the last two papers we move from passenger transport to freight and logistics. Strale (2019) analyses the academic debate on so-called "sustainable urban logistics". His findings reflect key problems identified earlier in this introduction: economics, management and engineering dominate the academic debate; methods mostly relate to best practices and modelling, including econometrics;

research favours the search for innovation and practical solutions to "optimise" flows and deliveries instead of exploring logistics as both foundation and materialisation of the capitalist system. As a result, logistics is rarely interpreted as directly produced by the capitalist system. Despite the acknowledgement that sustainability also comprises social and economic issues, it is the environmental dimension of logistics that is usually prioritised. Compared to research on passenger transport and mobility, de-politicisation of research matter is thus even more the norm, and critical views are less common.

Cidell (2019) closes the virtual special issue by focusing on the question of freight and logistics by attending to a particular case related to a cargo rail itinerary. The paper analyses how residents living near a belt railroad, approximately 80 kilometres from Chicago, attempted to oppose to a railway company acquisition project, which involved rerouting freight trains away from central Chicago. Comments made during the consultation process came mostly from the wealthier suburban neighbourhoods. At the same time, participation by residents from centrally-located and working-class areas was limited. Their line of argument revealed how much they want to preserve their own quality of life while having access to central Chicago, and the employment, education and leisure opportunities it offers.

### 4. Reflections and avenues for further critical research about transport

The diverse contributions to this virtual special issue offer a number of avenues for thinking critically with and through urban transport policies, practices, infrastructure as part and parcel of capitalism. What emerges from this anthology is that there is no singular or universal way of being critical about urban transport. Unravelling and analysing power and ideology underpinned and reproduced by transport in urban settings is by no means an exercise that hinges on a particular theoretical lens (Marxist, anarchist, feminist etc.) or focuses on a specific social group or factor (class, gender, ethnicity and race, age). However, this exercise is far from complete, and much remains to be done. This last section proposes four potential directions for further critical research—a travel plan that is by no means definitive or exhaustive.

## Diversifying spaces and scales: exploring long-distance travel

In this issue we have chosen to centre upon urban transport. However, critical explorations of power relations and inequalities that shape transport should also embrace inter-urban, long-distance passenger mobilities. For instance, studies into high-speed rail and equity tend to consider spatial

equity to the detriment of social equity (Pagliara and Di Ciommo, 2020). As critical scholars have mostly neglected this theme, fundamental questions about long-distance travel regarding transport justice, power relations and the relationship between transport and the capitalist system remain to be addressed. Examples of under-researched themes include the analysis of low-cost airlines (e.g. the relation between their profits, tax evasion strategies, state subsidies, and sub-optimal working conditions; the alleged socio-economic diversity of their passengers (Dobruszkes, forthcoming), and high-speed rail services (e.g. the over-representation of privileged social groups and classes among their passengers despite their allegedly public character, co-funded by the state and its taxpayers (Buier, 2020)). Given the urgency of the climate crisis and the rising social inequalities related to mobility, it is vital to unpack the juxtaposition between, on the one hand, "sustainable" transport planning for intra-urban travel (e.g. introducing congestion charging, facilitating cycling and walking) and, on the one hand, the continued rise of aviation in inter-urban mobility. We argue that a particularly relevant approach addressing this juxtaposition involves an intersectional lens, to detect inequalities related to class, race and gender.

### Diversifying transport objects: analysing freight and logistics

This special issue perhaps serves as a perfect illustration that critical research predominantly focuses on passenger mobilities while neglecting freight and logistics. There are potentially two reasons behind this relative absence. On the one hand, as critical research builds on critical social theory, it applies concepts (such as social inequality, power relations, ideology etc.) that may connect more naturally with empirical analyses of social groups and individuals, rather than material goods and their flows. On the other hand, as explained by Strale (2019) in this special issue, logistics is rarely interpreted as the machinery of capitalism. To address this, we propose to trace freight flows and analyse the logics of freight transport, to better understand the political economy of profit-oriented logistics industry and the spatial strategies it employs.

### Diversifying social theories: looking for the missing Marxist approach to transport and mobility

Kesteloot (1985) states that "any geographical research that targets explanations [instead of offering a mere description] has to include a social theory because investigated facts are the result of human actions displayed within a given society". Although the field of transport and mobility, similarly to many fields of social sciences, employs a diversity of theories, transport scholars rarely acknowledge and discuss the epistemologies that underpin their work. At best, their theoretical choices are implicit; at worse, they remain ambiguous and esoteric, as it is often the case with postmodern approaches to

<sup>&</sup>lt;sup>3</sup> Translated from French by the authors.

transport and mobility.

Therefore, it is intriguing that a long established critical current such as Marxism has not really engaged with transport matters. Although critical urban theory has strong Marxist underpinnings, Marxist scholars have never developed a robust approach to studying engaged transport issues. Even though some scholars did inquire into "why should transport networks be studied separately from the pressure groups, oppressive economic systems, and individualistically exploitative situations in which they so frequently occur" (Hurst, 1973), the works of Marxist urban scholars such as Manuel Castells, David Harvey, Henri Lefebvre, Neil Smith, Doreen Massey and Eric Sheppard mention transport only occasionally, as they attend in more detail to other aspects of urban life. This is rather surprising if one observes that transport provides a framework for generating profits in capitalism, and that transport patterns are produced by social-spatial structures rooted in the capitalism. In other words, as transport offers a useful vehicle for analysing the capitalist logic, a Marxist approach to transport remains to be developed. One theme in which such an analytical lens could be particularly pertinent is that of unravelling capitalist dynamics within transport companies, to explore how public transport services may be transferred to private firms, resulting in a change of working relations, and raising the fundamental question of whether the role of public transport is to provide a public service to its passengers, or rather to generate profits for its shareholders.

### Diversifying epistemologies: contributing to a decolonial turn in transport studies

Crucially, embracing these research areas cannot be achieved without a much-belated reflection about the coloniality embedded in the field of transport and mobility. By coloniality we understand a matrix of "long-standing patterns of power that emerged as a result of colonialism, but that define culture, labour, intersubjectivity relations, and knowledge production well beyond the strict limits of colonial administrations" (Maldonado-Torres, 2007). This involves not only exploring the historical significance of transport for colonialism, but also recognising its contemporary colonial dynamics. For instance, while local transport stakeholders in the Global South and East may be aware of diverse approaches to transport and mobility, including of critical kind, they often receive training that relies predominantly on neoclassical engineering and econometrics, and operate under the pressure of ensuring economic growth and well-being of their communities by stimulating individual mobility, regardless of its social and environmental cost. Moreover, they operate in countries that the Northern prejudice labels as "developing" or "in transition", pressured to "learn" about and "borrow" sustainable transport "best practices", validated by their apparent "success" in "developed" cities of the global North (Pojani & Stead, 2015). These transport "solutions" are often framed as universal one-size-fits-all "models" (Marsden & Stead, 2011), as evidenced by several contributions to *TR-A*,

applicable in contexts as diverse as Bosnia and Herzegovina (Glavic et al., 2017), Brazil (Bezerra et al., 2020) and Ghana (Jones et al., 2013).

Addressing this bias is one of the objectives of a long overdue decolonisation of transport theory and practice (Schwanen, 2018; Wood, 2020). The development of critical thought is geographically heterogeneous, shaped by complex relationships between political regimes, as well as cultural and teaching traditions. As thinking and knowing critically is certainly not limited to any particular language or place—for instance the Anglophone academia of the global North—it should not be understood as dependent on applying a single epistemological lens universally across geographical contexts. Instead, in an effort to question the domination of Western thought in transport studies, and to provincialise it (Roy, 2009, 2016), theory may originate from explorations of local articulations of capitalist relations that underpin transport in diverse contexts in the Global East and South, opening up transport to epistemologies and subjectivities (Davidson, 2020) that do not originate in the scholarly traditions developed in the global North (Mignolo & Walsh, 2018). Crucially, this means embracing voices from these subaltern localities and subjects as sources of theory, and not just empirics (Robinson, 2002, 2016).

As much remains to be done in terms of exploring transport and mobility critically, we hope that *TR-A* continues to provide a useful vehicle for the journey ahead. In the meantime, we thank the Editors of the journal for their kind support to this special issue.

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