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Editorial: Long-distance travel, between social inequality and environmental constraints

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Introduction

Long-distance passenger travel – whether domestic or international – accounts for a small share of trips, but a large and growing share of travel distances and greenhouse gas (GHG) emissions. The International Transport Forum (ITF, 2021) estimates that globally 'intercity travel' accounted for 33 % of mileage and 38 % of CO2 emissions from passenger travel in 2015. Notably, aviation's net effective climate impact (in terms of radiative forcing) has increased by 51 % between 2005 and 2018 (Lee et al., 2021). While long-distance travel plummeted during the COVID-19 pandemic, it is expected to rebound quickly. Globally, intercity travel mileage is expected to grow by 80 % between 2015 and 2050, and GHG by 25 %, mostly due to aviation, unless stringent decarbonisation policies are implemented. This has led ITF to state that the "fight to lower transport emissions could be won or lost outside cities" (2021, p.130).

As climate change climbs up the political agenda, long-distance travel is drawing increasing attention. Yet our understanding of this travel segment is limited in at least three respects. First, an accurate assessment of levels and trends in long-distance travel remains difficult, as it is challenging to capture in household surveys, and has traditionally been overlooked in favour of everyday travel within urban areas. Second, the social, economic, lifestyle and environmental drivers of this travel demand segment remain under-researched, although we know that non-work and leisure activities play an important role, as do several broad social trends (e.g., transnationalism, migration, information and communication technology, changing nature of work, individualisation, ageing). Finally, more knowledge is needed on policy approaches to curbing long-distance travel demand.

Participation in long-distance travel is extremely uneven, with e.g., 37 % of EU residents reporting that they 'never' travel to other countries, and half or more of the population in the Global North countries not flying at all in a 12-month period, according to published survey figures (Hopkinson and Cairns, 2021). Among those who do make long-distance trips there is a clear overrepresentation of certain social groups (e.g., high-income, high-education, and urban dwellers). The pattern is one whereby large sectors of the population participate (very) little in long-distance travel, while a minority of privileged 'frequent travellers' are responsible for a large share of total travel distance and emissions (see e.g., Czepkiewicz et al., 2019).

While the burgeoning body of research on transport poverty, equity and justice investigates inequalities in travel behaviour and accessibility, to date it has mostly focused on the local and regional environment, perhaps because of the more direct link between daily travel and the satisfaction of basic needs. Yet there are several good reasons to investigate inequalities in long-distance travel, including: questions around the fairness of allocating public resources to the expansion of long-distance transport infrastructure; the disproportionate contribution of frequent long-distance travellers to environmental externalities; and the possibility that some forms of long-distance travel may be instrumental to social inclusion, particularly as activity spaces have expanded.

Overall, adopting a joint social and environmental perspective on long-distance travel raises a number of intriguing research and policy questions, which have not been sufficiently explored to date. For this Virtual Special Issue (VSI) we sought interdisciplinary contributions on the drivers, trends and socio-spatial patterns of long-distance travel behaviour, framing them within the following, overarching question: how can long-distance travel demand be reconciled with environmental limits, while ensuring equitable access to long-distance travel opportunities, and a fair use of public resources?

The VSI consists of 11 articles, 10 of which are from European scholars and/or are focused on Europe, and one is from the US context.1 The articles adopt a variety of definitions of long-distance travel, whether based on travel distance, overnighting or travel time, which mirrors the diversity of approaches in the literature (see Mattioli and Adeel, 2021). Many of the articles focus on specific modes, such as air travel and high-speed rail, which by definition serve almost exclusively the long-distance segment.

The issue begins with a set of four quantitative empirical studies which investigate the individual-level determinants of long-distance travel behaviour. Kim and Mokhtarian (2021) investigate the factors associated with overnight domestic leisure travel by air and car among Georgia (US) residents. They find evidence for the effect of a range of socio-economic, spatial and attitudinal factors, but no association with environmental attitudes. The results are also suggestive of a sort of ‘substitution effect’ between air and car travel, with people living closer to a major airport being more likely to fly, but less likely travel long-distance by car. Based on UK data, Mattioli and Scheiner (2022) corroborate the hypothesis that migration background is associated with more frequent air travel for private purposes, largely due to spatially dispersed social networks that need to be maintained. The authors comment on the challenges that this raises for equitable travel demand management and climate policy in the aviation sector.

The other two studies within this group are from Germany and focus mainly on the impact of socio-psychological factors on travel behaviour, considering both the daily travel and long-distance segments. Dütschke et al. (2022) find that the inclusion of socio-psychological variables considerably improves the goodness-of-fit of regression models predicting mode choice in long-distance leisure travel, providing evidence of (sometimes counterintuitive) patterns of association with constructs such as ‘perceived behavioural control’ and ‘awareness of consequences’. The segmentation study by Magdolen et al. (2022) identifies four leisure travel types, one of which (“young travel-addicted urbanites”) is characterised by low car use in daily life, higher ecological norm orientation, but high frequency of air travel. This dovetails with the findings of previous research on ‘modality styles’, where similar clusters have been identified (e.g., Groβe et al., 2018).

A second set of articles deals specifically with inequalities in long-distance travel, focusing on two different modes. Büchs and Mattioli (2021) examine the claim that participation in air travel has become less unequal over time, based on data from the UK. They find that while inequality has decreased in relative terms since 2000, it remains very high in absolute terms, and well-situated groups have contributed most to the expansion of air travel. Dobruszkes et al. (2022) review worldwide evidence on the social attributes of high-speed rail (HSR) passengers, confirming that this mode of travel is 'socially exclusive' along the lines of gender, age, income, occupational group and education. In doing that, the article also puts forward a novel framework for conceptualising social inequalities in long-distance travel. Both articles dwell on the implications for environmental policy, with Büchs and Mattioli (2021) supporting air travel demand management measures, and Dobruszkes et al. (2022) questioning the fairness of public investment into HSR.

The third set of papers focuses on air travel in academia, a sector where frequent flying has become normalised. Based on a qualitative analysis of interviews in Switzerland, Kreil (2021) examines the tension between reducing air travel for environmental reasons (which universities are increasingly committing to do) and the extent to which frequent flying has become necessary for academic work practices. Nevins et al.'s (2022) conceptual piece argues that reducing air travel would contribute to the 'decolonization' of academia, thereby reducing global inequities and helping bring about 'socio-ecological justice'. Taken together, the two articles suggest that academia is an interesting sector where frequent flying is already 'locked-in' to some extent. We expect that this sort of questions might become of more general interest if air travel activity among the population continues to grow.

Something similar can be said for Árnadóttir et al.'s (2021) study of Iceland – a country characterised by remarkably high levels of air travel, due to its geography and wealth. The authors conducted qualitative interviews with young people, finding that despite high levels of climate awareness none of them is willing to quit flying, and that they mobilise various discourses to justify this discrepancy. Overall, the results point to a "cultural normalization of carbon intensive air travel" among this milieu.

Pucci et al. (2022) focus on a rather different type of long-distance travel in their mixed-methods study of long-distance commuting in Italy. They show that the number of long-distance commutes has increased rapidly since 2000, possibly partly because of HSR network extension, although most trips are by car. Qualitative interviews show that a complex interplay of factors leads households to opt for long-distance commuting, confirming previous research. Overall, the authors frame long-distance commuting as a sort of 'lose-lose' situation, with negative effects both for the environment and for the quality of life of people who do the commute.

Finally, Malichová et al. (2022) conclude the VSI with a quantitative study based on data collected in various European countries with new app-based methods. The article illustrates the challenges and opportunities of these new methods, while also providing substantive findings on the perceived 'worthwhileness' of travel time in long-distance trips and how this varies according to travel mode.

Overall, the 11 articles in this issue provide a good and original overview of both established and emerging themes in research on long-distance travel. They also illustrate how the environmental and social inequality aspects of long-distance travel are increasingly brought into dialogue with each other. We hope this will inspire further research on this nexus in the 2020 s, as this is urgently needed.

CRediT authorship contribution statement

Giulio Mattioli: Conceptualization, Writing – original draft. Frédéric Dobruszkes: Conceptualization, Writing – review & editing. Joachim Scheiner: Conceptualization, Writing – review & editing. Zia Wadud: Conceptualization, Writing – review & editing.

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