MOBILITIES AND LIVELIHOODS IN URBAN DEVELOPMENT CONTEXTS: INTRODUCTION

Since transport studies as a research discipline is mainly concerned with the design and operations of transport systems, it can come as no surprise that people's daily mobilities, in terms of their everyday livelihoods, has traditionally attracted minor attention within the literature (Fouracre et al., 2006; Lucas, 2011; ; Alberts et al., this volume). This area of enquiry has been more common within the domain of the social sciences; in particular, for anthropologists, psychologists and human geographers researching within development contexts (e.g. Bebbington and Batterbury, 2001; Scoones, 2009; De Haan, 2009). Within transport geography there has also been some recent and growing interest in exploring accessibility to the transport system and the connectivity of transport systems with people's activities in development contexts (e.g. Bocarejo and Oviedo, 2012; Tiwari and Jain, 2012; Delmelle and Casas 2012; Oviedo and Dávila, 2016). Only rarely, however, have these two disciplinary perspectives been brought together (as in Grieco et al. 1996, with reference to a West Africam city, or Porter et al. 2007, for rural locations in the same region). Here, in this Special Section of the *Journal of Transport Geography*, we have attempted to do this with specific reference to the mobilities and livelihoods of low-income populations living in diverse rapidly developing urban contexts across the Global South.

It is important to bear in mind some common characteristics of the livelihood systems in which so many poor urban residents – young and old, male and female, able-bodied or disabled - must operate within developing cities. The vast majority 'get by' through labour contributions to a precarious informal sector, where fortunes are shaped not only by local contextual factors, such as prevalent social practices and the ebb and flow of fortunes in the immediate resource base, but by a web of relationships which extend not only to the national boundaries but far beyond, to global systems of power and inequality (Ciccantell and Bunker, 1998; Booth et al., 2000; Martell, 2010).

Thus while a sudden flood of cheap imports has the potential to rapidly shrink local production systems and destroy associated local livelihoods (Simone and Abouhani, 2005), a major infrastructural development in the city such as bus rapid transit (BRT) has similar potential to impact negatively on both informal petty trade and transport

services (Okoye et al., 2010). Petty trade and work at the bottom end of the transport sector (porterage, loading, drivers' mates, repair services, bicycle taxi operation etc.) are commonly key urban livelihood 'niches of necessity' for the poorest. This is especially the case for the many young people who, even with a modicum of formal education, are frequently unable to find satisfactory employment.

The conduct of petty trade is intimately linked with the transport sector, as Esson et al., (this volume) demonstrate very effectively. Not only have goods to be obtained from one location, then transported to another for sale, but the optimum sale space itself is likely to be located along those congested major route-ways where potential purchasers have to drive at a snail's pace, allowing for traders to display, bargain and complete sales with the occupants of passing vehicles in c. 100 metres or so of travel. The encroachment of such informal markets onto the road itself, and the potential for transport interventions to disrupt such trade and destroy livelihoods in the trading sector are well illustrated in Ikioda's Lagos study (this volume).

Meanwhile, many others, whether in work or searching for employment, trudge long distances across the city each day, from their homes in the urban periphery (where rents are often lowest), to the richer areas around the city centre and middle-class neighbourhoods (where domestic service and other work is most available) (Tiwari, 2003; Ahmed et al., 2008; Mandri-Perrott, 2010; Cervero, 2013; Naumann and Fischer-Tahir, 2013; Oviedo and Dávila, 2016). Low-income workers waste hours in this unproductive activity because they are unable to afford transport. At the same time, they expose themselves to the dangers of injury or death through road traffic accidents, noise and air pollution, as well as crime and violence along traffic-filled routes with unfit pedestrian facilities.

There are still opportunities to address these transport inequalities within many developing cities. Unlike in the Western world, where transport systems are already largely fixed, developing cities have considerable potential to reshape the future trajectory of people's mobilities and associated livelihood potential through the introduction of more fairly allocated and regulated new transport systems. Unfortunately, in the main, politicians and city planners are choosing to adopt foreign urban development practices inspired by Global Northern interests (Rizzo, 2015). This opens the door to largely deregulated road-based systems, primarily designed for

the privatized movement of goods and services, with all too often people (and especially the poorest) as a last consideration.

Such adoption has resulted in chaotic urban sprawl and gridlocked infrastructures which, when combined with the institutional instabilities that plague many developing countries, have become a major obstacle to the development of more socially sustainable transport planning (Cervero, 2013). Many of the mobility solutions being adopted by developing cities are transplanted wholesale from the developed world, without due consideration of the local context or the mobility needs of local populations. Every developing city has its own complex socio-spatial system and requires fully contextualized understandings of the socio-economic consequences of different mobility solutions for different sectors of the population if it is to ensure that its population is adequately provided with sustainable access to goods, services and activities, now and long into the future (see Dimitriou, 2011 for more on this).

There are also many developing cities with burgeoning populations where, despite massive pressure on existing basic transport infrastructure and services, major planned interventions of any sort are yet to emerge. Here, local populations have to continue constructing their own informal solutions to the gridlocked traffic congestion and other related problems that prevail. Widely popularized informal motorized taxis and jitneys [and the more recently emerging motorcycle taxis and three-wheelers in Sub-Saharan African (see Lourdes et al., and Esson et al. this volume) and some Latin American cities (see Maia et al, this volume)] become the only available way to access the city, apart from on foot, even for its poorest residents. Studies have shown that sole reliance on these informal systems is generally negative for people's livelihoods, as they are often expensive, dangerous and polluting, as well as inefficient in meeting workers' everyday mobility needs (Cervero, 2000; Al-Hasan, 2015).

Whether the transport-planning context is intervention or neglect, it is always the poorest populations which face the greatest challenges as they attempt to 'get by'. Commonly forced by poverty to live in the least accessible [lowest cost] peripheral locations, far from major public transport routes, with the least resources to purchase personal transport or to pay transport fares, they are further marginalized by lack of power and voice (Ahmed et al., 2008; Naumann and Fischer-Tahir 2013). Long working days, sandwiched between long, often uncomfortable, occasionally

dangerous, journeys to and from work reinforce the friction of distance. It is a relationship full of contradictions: on the one hand mobility helps to raise quality of life standards by offering improved access to city opportunities, whilst on the other hand the ubiquitous lack of access to transport services amongst the urban/peri-urban poor severely constrains their potential for economic and social development.

In this Special Section, we offer six detailed case studies presenting the mobility needs and concerns of low-income populations and how their livelihoods are affected (or not) by the new transport projects that are being developed in the cities where they live. The case studies focus on quite diverse urban contexts, each with different levels of land use and transport development and differing conditions of poverty.

In the first paper, for instance, Maia et al., (this volume), describe their research with different groups of low-income residents in two contrasting communities in the Metropolitan region of Recife in Brazil: one in the highly accessible city-centre favela of Corque and the other in the urban peripheral community of Alto Santa Teresina. The authors identify high reliance on walking for all trips and so a key question examined in the paper is the extent to which the restricted mobility and activity patterns of the citizens has an influence on their quality of life.

Each of the cities that form the case studies also varies significantly in terms of their geographies and economic, social and political institutions. The mobility needs and perspectives of a diverse range of people are presented: not only unemployed and low-waged male and female workers of conventional working age (around c.15-60y), but also children and older people, many of whom, of necessity, also form part of the informal urban labour-force. This is important because different groups of people may be more or less transport disadvantaged even within the same low-income community and so their mobility and livelihood outcomes may also differ significantly. Thus, in Alberts et al.'s (this volume) study of urban peripheral communities in Chennai, India, it is the women who adapt most quickly to resettlement from slum clearances, in an attempt to re-establish their livelihoods in their new locations. By physically isolating women from their previous livelihoods, a new demand for greater physical mobility is ignited and the problems of safety, affordability, and accessibility become further inculcated as factors in their heightened social deprivation.

In the case study with residents of the Soacha community in the urban periphery of Bogota in Columbia, Oviedo and Titheridge (this volume) find that many of the people who are living in areas with very low access to public transport services devise complex mobility strategies in order to maintain a good level of access to livelihood opportunities both within the city itself and in other peripheral areas. Here, and similarly for residents in the Recife study by Maia and colleagues, informal transport is the key to accessing opportunities. These informal transport services can be either privately or publically owned, but almost always provide a flexible, usually cheap, possibility for low-income residents to get to their employment, education and shopping destinations when formal public transit services are not available at their home locations. Informal transport services are often described by local people as their 'life-line to the city', but are usually seen as undesirable by transport professionals because they are perceived to be unsafe and impossible to regulate. As such, when new public transport services are planned in developing cities, it is almost always to the detriment of these informal supplementary services, which can be a problem both for the continue accessibility of local people, as well as for the livelihoods of the many low-skilled workers who provide them.

Two of the papers consider this issue of *transport as livelihoods*, and discuss the ways in which transport systems can act as informal, and thus often under-valued, employment opportunities for low-income populations within cities. Although this is a slightly different take on the topic of mobilities and livelihoods, it serves to highlight a further aspect of the often over-looked and unintended economic and social impacts associated with the introduction of new transport systems within development contexts.

Olvera et al. (this volume) highlight the case of motorbike taxis in Lomé, Togo. Motorbike taxis are becoming a major mode of public transport in a number of developing cities in Africa, India, South East Asia and Latin America and can have numerous effects on mobility and the living conditions of low-income urban populations. Their study shows that low-skilled young males, driving a motorbike for hire, not only offer many low-income peripheral people reliable and flexible mobility that is unlikely to be paralleled by traditional fixed-route public transport services, but also provides their drivers with a route out of poverty. Ikioda's (this volume) paper offers a slightly different 'transport as livelihoods' perspective by focusing on the

issue of the new rights of way that have been provided as part of an urban expressway in the City of Lagos. This is a strategic route that will link Lagos with other key destinations in Western Africa and is intended to improve business and enterprise in the city centre. However, numerous small enterprises have been displaced by the development and, in particular, Ikioda highlights the plight of market and street traders at two markets located along the expressway – the Agboju Market and New Alayabiagba market – where livelihoods are under threat from the new construction.

In the final paper, Esson et al. similarly draw on in-depth, qualitative research, in this case to reflect on the breadth and depth of the intersections between livelihoods and mobility in Ghana's capital city, Accra. Here mobility forms an integral part of income-generating activities for diverse groups of people: home-based enterprise operators, those with a business located elsewhere, and itinerant workers. Increasing adoption of mobile phones and motorbike taxis, meanwhile, are contributing new elements to the transport/trade nexus (albeit, in the case of motorbike taxis with age- and gender- usage implications).

We recognise that our coverage of these complex and varied issues within this Special Section is very far from comprehensive, systematic or complete. Our intention has been simply to draw attention to some exemplar case studies that can illustrate the ways in which low-income populations living in extremely challenging urban environments conduct their everyday mobilities, alongside and interacting with the emergent transport systems that are shaping their cities. A common theme across all the studies is that rarely do the planners of major transport projects consider their social impacts on local populations. Particularly overlooked are the lowest income groups, who have no option but to continue to conduct their daily activities in and around new transport developments, often with devastating consequences for their quality of life. On the other hand, sometimes these new transport projects can provide new livelihood opportunities for specific individuals and groups in the population, which also appear to be unplanned for by the developers and promoters of the projects, with equally unforeseen consequences for local residents and traders.

Four common themes regarding planning and governance have emerged from the papers for consideration by researchers, policy makers, planners and the funders of new transport projects in development contexts. Firstly, there is the need for more bottom-up *user and non-user* perspectives from the outset of the planning process, to

better understand how transport projects will affect people's wellbeing, with an emphasis on mitigating any disruption of livelihoods and facilitating more inclusive project design. The politics of public urban space in low income countries rarely provides for even the smallest of interstices where the voices of the poor (especially women and other vulnerable groups such as the aged and people of disability) can make themselves heard. Big business and so-called 'Big Men' (mostly men, occasionally women: i.e. individuals with substantial personal power, as in Utas 2012) control current city planning to a remarkable degree in most contexts. Corrupt practices lie not far below the surface of many planning decisions unfavourable to the poorest (Ka'bange et al., 2014).

Secondly, new transport systems need to be planned that purposefully include adequate provision for local people to continue to use (where appropriate to their needs) modes such as walking, cycling and animal-powered vehicles, rather than preventing or making usage of those modes more dangerous. Also, it is important to plan for transport which enables the many passengers with small loads – notably petty traders (whose livelihoods are crucial to so many urban families) – to travel in the same vehicle with their goods, and thus ensure safe, secure transit. Thirdly, there is the need to design-in and cater for the existing informal transport sector as an important element in supporting the continue accessibility and inclusion of low-income populations (as also strongly argued by Behrens et al. 2016 for Africa), as well as to recognise and actively support the on-going use of transport hubs as an important location for informal local trading. Fourthly, there is the need for more critical evaluation of both the role of urban transport projects in shaping the wider political economies of developing countries, and the role of the wider political economy in shaping urban transport policy.

A notable feature of the papers in this Special Section is that they have drawn upon a wide variety of methods, including non-standard data collection and analytical approaches, but with a strong emphasis on qualitative research. The data collection techniques that were employed include in-depth interviews in Accra (Esson et al.), focus group and cognitive mapping exercises with community participants in the Brazilian study (Maia et al.), semi-structured interviews combined with GIS-analysis of local travel patterns using data from technical appraisals of the transport system in Columbia (Oviedo and Titheridge), structured interviews with spatial visualisation in

Chennai (Alberts et al.), and interviews, photographs and observational research in Lagos (Ikioda). In each case study, the data that were collected have been carefully analysed not only to describe the over-arching *and underlying* concerns of the research participants *from their own perspectives*, but also to highlight where there are *differences* in their perspectives according to, for example, age or gender. Such disaggregation of data is vital because mobility behaviours are rarely heterogeneous, even within the same household, and so especially not for residents living in different types of household and circumstances within the same community.

Finally however, as noted above, primarily qualitative data has, in many of the case studies, been complemented by supplementary quantitative data collection and analysis, such as GIS-mapping (Oviedo and Titheridge), more traditional surveys and travel diaries (Olvera et al.) or photographic evidence (Ikioda). Such additional evidence does help to extend, enhances and, arguably, further validate (through triangulation) the activity, journey patterns and travel experiences that are described in rich detail by research participants during in-depth interviews. However, the case studies also demonstrate how valuable careful qualitative data collection and analysis is *in its own right* for the development of sound, textured understandings of key issues. Nonetheless, in the policy world it is also necessary to bear in mind the place that numbers often plays in decision-making: where problems are seen as a majority issue, action is more likely to follow. Clearly, in all the cities considered in this Special Issue, evidence-based transport policies which take adequate account of the livelihood needs of their poorer, less-powerful inhabitants are urgently needed. This encourages a growing emphasis in transport studies towards the more mixed-methods and interdisciplinary approaches that we present here.

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References

Ahmed, Q.I., Lu, H. and Ye, S. (2008). 'Urban transportation and equity: A case study of Beijing and Karachi'. *Transportation Research Part A: Policy and Practice* **42.**1. 125-139.

Al-Hasan, A.Z., Momoh, S. and Eboreime, L. (2015). 'Urban poverty and informal motorcycle transport services in a Nigerian intermediate settlement: a synthesis of operative motives and satisfaction'. *Urban, Planning and Transport Research* **3**.1. 1-18.

Bebbington, A.J. and Batterbury, S.P.J. (2001) 'Transnational Livelihoods and Landscapes: Political Ecologies of Globalization'. *Cultural Geographies* **8**. 369-380.

Behrens, R., McCormack, D., Mfinanga, D. (Eds.) 2016 *Paratransit in African cities: operations, regulation and reform.* Abingdon: Routledge.

Cervero, R. (2000). *Informal transport in the developing world*. UN-HABITAT.

Cervero, R.B. (2013). 'Linking urban transport and land use in developing countries'. *Journal of Transport and Land Use* **6**.1. 7-24.

Ciccantell, P.S. and Bunker, S.G. (1998). *Space and Transport in the World-system*. London: Greenwood Publishing Group.

De Haan, L.J. (2012). 'The livelihood approach: a critical exploration'. *Erdkunde* **66**.4. 345-357.

Delmelle, E.D. and Casas, I. (2012). 'Evaluating the spatial equity of bus rapid transit-based accessibility patterns in a developing country: The case of Cali, Colombia'. *Transport Policy* **20**. 36-46.

Dimitriou, H. T. (2011). 'Transport and city development: understanding the fundamentals'. Chapter 1 in: Dimitriou, H. T. and Gakenheimer, R. (Eds). *Urban Transport in the Developing World: A Handbook of Policy and Practice*. Cheltenham: Edward Elgar.

Dimitriou, H. T. and Gakenheimer, R. (Eds). (2011). *Urban Transport in the Developing World: A Handbook of Policy and Practice*. Cheltenham: Edward Elgar.

Fouracre , P.R., Sohail, M. and Cavill, S. (2006). 'A Participatory Approach to Urban Transport Planning in Developing Countries'. *Transportation Planning and Technology* **29**.4. 313-330.

Grieco, M., Apt, N., Turner, J. 1996. *At Christmas and on Rainy Days: Transport,Travel and the Female Traders of Accra*. Aldershot: Avebury

Ka'bange, A., Mfinanga, D. and Hema, E. (2014). 'Paradoxes of establishing mass rapid transit systems in African cities – A case of Dar Es Salaam Rapid Transit (DART) system, Tanzania'. *Research in Transportation Economics* **48**. 176-183.

Lucas, K. (2011). 'Making the connections between transport disadvantage and the social exclusion of low income populations in the Tshwane Region of South Africa'. *Journal of Transport Geography* **19**. 6. 1320-1334.

Mandri-Perrott, C. (2010). *Private sector participation in light rail-light metro transit initiatives*. World Bank Publications.

Martell, L. (2010). *The sociology of globalization*. Cambridge: Polity.

Naumann, M. and Fischer-Tahir, A. eds. (2013). *Peripheralization: The Making of Spatial Dependencies and Social Injustice*. New York: Springer Science & Business Media.

Okoye, V., Sands, J. and Debrah, C.A. (2010). *The Accra Pilot Bus-Rapid Transit Project: Transport-Land Use Research Study*. New York: Millennium Cities Initiative and Accra Metropolitan Assembly, The Earth Institute at Columbia University.

Oviedo H. D. and Dávila, J.D. (2016). 'Transport, urban development and the peripheral poor in Colombia — Placing splintering urbanism in the context of transport networks'. *Journal of Transport Geography* **51**. 180-192.

Porter, G., Blaufuss, K., and Owusu Acheampong, F. (2007). 'Youth, mobility and rural livelihoods in sub-Saharan Africa: perspectives from Ghana and Nigeria'. *Africa Insight* 37.3. 420-431.

Rizzo, M. (2015). 'The political economy of an urban megaproject: The Bus Rapid Transit project in Tanzania'. *African Affairs 114. (455). 249-270.*

Simone, A. and Abouhani, A. (Eds.). (2005). *Urban Africa: Changing Contours of Survival in the City*. London: Zed Books.

Scoones, I. (2009). 'Livelihoods perspectives and rural development'. *The Journal of Peasant Studie*s **36**.1. 171-196.

Tiwari, G. (2003). 'Transport and land-use policies in Delhi'. *Bulletin of the World Health Organization* **81**.6. 444-450.

Utas, M. (Ed.). (2012) *African conflicts and informal power: big men and networks.* London: Zed Books.