SPECIAL ISSUE

THE DESIGN, EXPERIENCE AND JUSTICE OF MOBILITY

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INTRODUCTION

The central argument of the 'mobilities turn', that sedentarist frameworks have dominated social sciences for a long time, which has limited our understanding of mobilities (e.g. Cresswell 2006, 2010; Hannam *et al.* 2006; Sheller & Urry 2006; Urry 2007) – also applies to the spatial disciplines, and human geography in particular. Of course, the movement and transport of goods and people have always been on the agenda of the spatial sciences. However, these mobilities have mostly been analysed from the position of fixed points. In mainstream transport research, mobility has typically been perceived as 'merely' a derived demand, warranting study only as a connector between desired activities. In line with this conceptualisation, movement between places is, either implicitly or explicitly, considered as friction and a loss of time that has to be limited. Equally so, the push-pull models of migration studies presented the mobile part as a static point-to-point movement without any further social meaning or transformative power. From the position of fixed points, mobilities have thus been perceived as 'residual death time,' 'friction' or 'empty spaces' (e.g. Cresswell 2006; Urry 2007).

Scholars who engage themselves in the mobilities turn approach spatial interaction and mobility differently. First of all, mobility is seen as a process and a motor of change. Both places of origin and places of destination change through the movement of people, goods, money and information from one place to the other, and thus mobility is seen as a major factor in space- and place-making. This goes beyond the traditional geographical approach, which focuses primarily on changing spatial structures as a resultant of spatial interaction potentials. Second, these mobilities researchers explicitly explore how people, as well as other material and immaterial objects of exchange, change themselves through the process of relocation, something which has largely been ignored in the spatial disciplines, and mainstream transportation research in particular. While this new mobilities' research is an interdisciplinary debate bringing together, among others, geographers, anthropologists, planners, political scientists and sociologists to re-think the role of mobility in different societies (Hannam *et al.* 2006, Urry 2007), authors strongly share these basic starting points.

The emerging new mobilities literature, we argue, has the potential to substantially enrich mainstream transportation research. However, this requires transcending existing boundaries and bridging the divide between the world of 'transport mobility' – perceiving mobility a way to overcome the friction of distance and a functionalist force and (re)structuring the urban landscape – and the world of 'practice mobility' – approaching mobility as a transformative power opposing the fixity and boundedness of space and place (Massey 2005; Cresswell 2006; Sheller & Urry 2006). The differences are not only to be found in terms of disciplinary

jargon and research topics, but also in terms of methodology and conceptual frameworks. To create a common ground for debate, we have identified three potential bridging concepts that may help evoke a border-crossing debate. These dimensions are: designs, experiences and justice. Before discussing the extent to which the different contributions in this special issue invoke these bridging concepts, we first articulate the ways we think they can bring both sides of the divide closer together.

MOBILITIES AND DESIGNS

Whether it concerns the mobility of containers, the commuter, or the illegal migrant, mobility always need some facilitation. In transport mobility research, the facilitation of mobility is primarily perceived as a matter of the efficient organisation and governance of physical infrastructures. Hence, designs are understood as a structuring force that enable the movement of people, goods, capital and information. The perfect transport design would be 'invisible'; it would imply a complete elimination of the frictions created by geography. Transport-design, as well as transport-research, have been predominantly driven by the desire to cater for travel 'needs' as efficiently as possible – the transport system being perceived as merely a neutral connector (Baeten 2000; Martens 2012). Even in research applying psychological perspectives to travel experiences, the goal of optimal system design has often been the implicit goal (e.g. Eriksson *et al.* 2008).

Whereas the focus in transport mobility research lies on the technical and spatial development of infrastructures, practice mobility research seeks to explain the facilitation of mobility by the organisational capacity of people and their social capital. Peters (2006), for example, outlines in his theory of passages how Thomas Cook (the forefather of Western tourism) had to connect different spatio-temporal elements to facilitate his customers' travel and to reduce their uncertainties during their travel. Next to the use of different transport modes, Cook's methods included the hiring of guides and the introduction of travellers' cheques. Similarly, several theoretical strands of migration research highlight the fact that migratory journeys are facilitated by migrants' social network (Faist 2000; Collyer 2005). It is commonly believed that migrants' strong and weak social bonds lower the financial and psychological costs of migration.

It is important to realise that any form of mobility not only requires some design beforehand, but also, and increasingly so, some co-ordination, maintenance and, possibly, reparation during the act of moving (Peters 2006). The recent emergence of communication technologies in public transport that provide up-to-date information during the journey is an illustrative example in this respect. Another example is the fact that many irregular migrants have to readjust their plans, find new pathways and create *en route* social capital in order to cross certain borders during their journeys (Schapendonk 2011).

It is clear that the transport debate focuses predominantly on physical infrastructures while the debate on practice mobility emphasises the role of social infrastructures. The common ground is that they both apply a system perspective, rather than an individualistic approach to mobility, in which different actors and different power relations play their roles. Yet, both approaches to mobility could be enriched by adopting each other's foci of analysis. Transport mobility research could pay more attention to the *social* design of mobility and the way it shapes patterns of movement and non-movement (see for example Peters 2006). While the interdependence of movements is increasingly acknowledged, in for example, activity-based travel modelling (Shiftan 2008) or multi-person accessibility measurement (Neutens *et al.* 2008), the breadth of this interdependence and its formative power in shaping overall mobility patterns is still hardly addressed (but see Kramer-Badoni, 1994). Practice mobility research, in turn, can be enriched by taking explicitly into account the role of rather fixed physical infrastructures. Here, it would be very interesting, for instance, to investigate more closely how international migration flows are influenced by the structuring design of international air travel. Moreover, in terms of commuting practices, it is worth exploring in more detail the influence of new communication technologies and the related infrastructures on the experiences of the commuters.

MOBILITIES AND EXPERIENCES

The second common ground to bridge transport mobility with practice mobility is the issue of mobility experiences. Different designs create different mobilities. Some mobilities are designed to create an exciting experience (e.g. a helicopter flight over New York), other designs aim for relaxation (e.g. a holiday cruise). Some designs prioritise fast travellers, which often depends on, and goes hand in hand with, the slowing down of other travellers (e.g. frequent flyers versus usual travellers at airports, or cars versus pedestrians) (Adey 2006). The latter form of design borders and orders movement (Van Houtum & Van Naerssen 2002). Other mobilities, however, are designed to overcome or disturb these ordered spaces and create *turbulence* (Cresswell & Martin 2012). We may think of demonstrations during G8 meetings and the border crossings of irregular migrants. The occurrence of turbulence may also be the effect of a lack of mobility or practice designs. The recent accident with the cruise ship near the Italian coast is a good example of this.

Practice mobility research has already elaborated intensively on how mobilities mean different things to different people in different situations (Adey 2006; Cresswell 2006; Schapendonk 2011). The central argument is that we become attached to our mobility in the same way as we become attached to certain places. As some places are more home-like than others, some mobilities are also more comfortable than others. Adey (2010, p. 4) underlines this by stating that 'our mobile life-worlds are mobile for us, with us, and sometimes they are against us'. While the empirical focus is on all that is on the move, the same scholars underline that we should not forget about feelings of immobility and slowness when we analyse the experiences of the mobile. Unexpected interruptions can be very frustrating, while other immobilities are welcome resting points in hectic mobility processes.

While there has been rich academic debate on experiences in the practice mobility strand, the role of experiences is rather under-researched in the field of transport mobility. That does not mean that experiences of mobility are non-important in this research strand.

We may even argue that experiences of inaccessibility or slowness lay at the heart of functionalist transport research, even in research that puts economic modelling central to the analysis. However, experiences as such, and their implications for both travel and travellers, are only addressed in the margin. Social-psychological approaches to travel behaviour are the exception, but even these studies tend to focus on the implications for particular travel choices rather than on the implications for the travellers themselves or their overall mobility patterns, although the latter is to some extent addressed in travel habit studies (e.g. Aarts & Dijksterhuis, 2000). Likewise, few researchers have explored how turbulence may affect travel experiences and, through it, travel behaviour in the long run. While transport mobility research has addressed the impacts of major disruptions of transport nodes (airport closures, e.g. due to snowfall or terrorist attacks; Ito & Lee, 2005), or smaller but recurring disruptions of a particular system (e.g., major train failures) on travel patterns, they have not sought to understand these changes through a more in depth study of travel experiences. It may be expected that such studies, along the lines of the mobilities paradigm, may lead to a more profound understanding of the role of 'turbulent' experiences in shaping (future) mobility and immobility.

MOBILITIES AND JUSTICE

Questions of designs and mobility inevitably involve the issues of power and justice, which is the third bridging concept between the fields of transport mobility and practice mobility research. Both strands of research provide ample examples of the injustice generated by policies, designs and embedded governance. For instance, practice mobility research has critically studied the impacts of free movement of EU citizens within EU boundaries as a factor explaining the immobilisation of others aiming to enter the EU (Verstraete 2001; Cresswell 2006; Schapendonk 2011). Likewise, transport mobility research provides substantial evidence of the lack of access to employment and basic facilities experienced by households who cannot operate a car (e.g. Social Exclusion Unit 2003).

However, the fields of transport mobility and practice mobility also substantially differ in the way they address justice concerns. First, for much of the work within the mobilities turn, processes of inclusion and exclusion and the politics of fast and slowness are core themes (Adey 2006; Cresswell 2010). In contrast, issues of power and justice have not (yet) become a mainstream concern in transport mobility research, as addressed by Soja (2010), in spite of a vast body of literature on, among others, 'women and transport' (Law 1999), spatial mismatch (Ong & Miller 2005), and transport-related social exclusion (Lucas 2004). Second, these latter strands of research within the transport mobility approach have typically sought to describe and explain the variations in patterns of exclusion/inclusion and mobility/immobility, whereas as many studies along the lines of practice mobility research have explicitly explored the workings of the discursive powers shaping these patterns (Silvey 2004; Cresswell 2006; Uteng 2006). Third, more recently some studies well rooted within transport mobility research have sought to define and elaborate on the contours of a fair 'mobility design' (e.g. Beyazit 2011; Martens 2006, 2012), while practice mobility studies have largely refrained from entering into prescriptive explorations. Fourth and indirectly related to the other forms of inclusion and exclusion are the aspects of social inclusion or exclusion of future generations as coined by the term 'sustainable mobility'. While transport mobility research traditionally always has an eye for the physical limitations of transportation systems, and thus almost by nature easily took into account the consequences of environmental impacts of our current mobility systems and mobility behaviour (Akerman *et al.* 2001) it is only recently that practice mobility studies envision a sustainable mobility.

These differences between the two strands of mobility studies also point at possibilities for mutual enrichment. Two such opportunities stand out. First, transport mobility research could substantially benefit from an in depth exploration of the discursive powers shaping governance practices at various spatial levels. This is likely to enrich the vast amount of studies assessing policy measures and typically recommending particular courses of action,

without attention to the web of power relations within which existing governance practices are embedded. Second, building on the careful deconstructions of power relations and the deep understanding of processes of exclusion and inclusion, practice mobility studies could take up the challenge and engage in explicit prescriptive theorising on desirable mobilities designs, accepting the risk of selectivity and exclusion embedded in virtually any design.

INTRODUCING THE CONTRIBUTIONS TO THIS SPECIAL ISSUE

The papers included in this special issue make some first attempts in bridging the gap between transport mobility and practice mobility research, drawing in different ways on the three concepts discussed above. With this endeavour to bridge the gap between those different traditions of thinking, it is almost a given that irrespective of which scientific medium one chooses for putting forward this argument and these contributions it is almost certain that it is the wrong medium, as it will probably not reach both target groups of scholars in an equivalent way. If we want to reach the typical 'practice mobility' scholar, it would probably be best to publish this series of papers in a journal like *Mobilities*, but then we would hardly reach the 'transport mobility' scholars. The other way around, publishing this series of contributions, coining in some way or the other the bridging concepts discussed above, in a typical 'transport mobility' journal like the *European Journal of Transport and Infrastructure Research*, then we would again miss out on a large part of our target group. In this respect, the authors of this general introduction to this special issue are very grateful to *Tijdschrift voor Sociale en Economische Geografie* in offering 'neutral ground' for these different schools and to create a space for a debate on different aspects of these bridging concepts. These bridging concepts were not the starting point of the contributions to this special issue but were the result of the debate provoked by these contributions[1] and has brought us a step further.

The contribution of Tim Cresswell and Craig Martin (2012) sets the scene of looking at mobility taking into account the full complexity of all the issues at stake, trying to incorporate

the physical aspects as well as the social experiential aspects, the dynamic as well as the stabilising aspects, the predictable and 'plan-able' or ordered as well as the unpredictable, contingent and unordered aspects. The term 'turbulence' is in itself a bridging concept, or as they denote it, as a meso-theoretical concept, which does not describe mobility as totally chaotic, nor as totally ordered, it actually shows how the different ordering and disordering forces create different degrees of mobilities and immobilities, different designs of mobility and different inclusions and exclusions of mobility. It attempts to conceptualise the phenomenon of mobility as a complex assemblage of different factors, actors, processes and conditions. As such it combines the experience, design and justice aspects within one theoretical framework. The issue of justice is addressed by its focus on the spatial differences in mobility. 'Mobility [. . .] does not happen evenly over a continuous space' (Cresswell and Martin, 2012, p. 516), and the related focus on differences in relations of power and resistance and in smooth flows or disruptions of mobility including the risky effects on the environment.

In the same line of thought in the section Outlook on Europe of this special issue, Joris Schapendonk, explicitly focuses on the experience of mobility and immobility of migration to the European Union. It shows how such a broader view on migration relates mobility with immobility, and thus also relates migration with the (power) differences in the migration process and at the same time it underscores the dynamics of the situation of mobility. At one instance a migrant is stuck and immobilised and at another instance an opportunity to move further pops up. Often these situations can hardly be intentionally influences and are highly 'turbulent' and are certainly not 'straight', nor straight forward (Schapendonk, 2012, p. 577). In a similar way Kloppenburg and Peters (2012) emphasise the incarcerated mobilities in return-migrants, which clearly shows mobility is closely related to immobility and furthermore they stress the political and discursive aspects of these movements, which put the physical infrastructure and personal capabilities to be mobile in perspective and thus links the concepts of design of mobility with disruptive experiences related to just or

unjust policy and governance interventions, which in their turn provoke opportunistic deliberate actions by legal or illegal actors. Again in the case Kloppenburg and Peters describe, the relationality of the concept of mobility is demonstrated, which clearly confirms the need for a more overall theoretical framework as suggested by Cresswell and Martin (2012).

Nikolaeva (2012, p. 542) in her contribution focuses on the aspect of design and links that to the aspect of experience. In her proposition 'more than just an airport' she tries to show that there is no such thing as just an infrastructural design for air travel, but that these endeavours are closely related to commercial use and the related neo-liberal discourse. Power and the just or unjust distribution of the potential to travel by air to the freely chosen destinations also play a role here but mainly in the form of monetary power. These airports are designed for the bright world of the well to do and high-spending air travellers and are more excluding to the less privileged. The design of the airport is created in such a way that travellers maximise their spending at the airport and thus are held immobile at the airport as long as possible and at the same time to make the airport as attractive as possible as transit location of final destination. Again mobility and immobility are intrinsically related as well as movement between places is related to the design and experience of these places.

The contribution by Essebo and Baeten (2012) addresses an issue which is directly related to the justice of mobility. Focussing mobility research one-sidedly on the aspects of infrastructural design it is often neglected that the mobility now is the immobility for the future. Sustainable mobility should secure the possibilities for mobility for future generations, while not destroying the material and environmental living conditions of these future generations. A discussion which also reached the 'mobilities paradigm' as anticipated by Sheller and Urry (2006) and as put on the agenda by Dennis and Urry (2009). In Essebo and Baeten's contribution they address the relationship between mobility and the different societal discourses of mobility and growth and of sustainability. However, as they describe the impact of these discourses, it is also made clear

that discourses in the field of mobility are also relational and thus derive their effectiveness and dominance from the experiential aspects of mobility and growth, generating anxieties as well as attractions related to hitherto (Fordist) and future (Tataist) mobile practices (Essebo & Baeten, 2012), while at the same time the material and environmental aspects irrespective of their discursive representations do create further restrictions to mobility and related injustices.

Finally Urry (2012), refers to an argument in the same line of thinking as Essebo and Baeten follow. He, once more, underscores the fact that these kinds of distributional 'injustices' are not only socially but also environmentally unsustainable. Looking at different mobility practices and assemblages, which combine humans, objects, physical conditions, technologies and scripts, this unsustainability, becomes very obvious and intelligible. The dynamics of these processes clearly show a general pattern leading to peaks after which practices will create turbulence and need to drastically change.

None of these contributions, address all relevant aspects of mobility in a holistic way as Cresswell and Martin (2012) propose, but as first articulations of the different interfaces between the distinctive worlds of transport mobility and practice mobility, and as first tentative operationalisations of some of the suggested bridging concepts they show us a way forward towards the full conceptualisation and empirical analysis of the turbulence of mobility.

Note

1. All contributions are based on the 2010–2011 series of Alexander von Humboldt Lectures at the Radboud University Nijmegen, on 'Cultures of Mobility'. Available at <http://www.ru.nl/gpm/actueel/von-humboldt/past-lectures/>. Accessed 18 September 2012.

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