

In: D. Henckel, S. Thomaier, B. Könecke, R. Zedda, S. Stabilini (Eds.), *Space-Time Design of the Public City*. Dordrecht: Springer (pp. 171-185).

**Konrad Miciukiewicz & Geoff Vigar**  
Global Urban Research Unit  
School of Architecture, Planning and Landscape  
Newcastle University

## **Encounters in motion: considerations of time and social justice in urban mobility research**

### **Abstract**

This Chapter investigates the qualities of urban travel time by looking at daily mobilities as time-spaces of encounter wherein various actions are performed. Following the ‘new mobilities paradigm’ we regard everyday urban mobility not only as a ‘means to an end’, but also as ‘end in itself’. This implies a move from instrumental, utilitarian and deterministic understanding of urban travel time towards a holistic conceptualisation of urban mobility that calls for embedding social qualities of urban travel in urban planning and design. We argue that urban public transport networks are political sites of the everyday wherein emancipatory and discriminatory practices are not only enacted, but also reshaped through different events, encounters, and processes. Hence, we challenge traditional time-saving strategies in transport appraisal and call for a more complex and politicized approach to time in policy-making that would highlight a socially-just consideration of speed, efficiency and qualitative aspects of urban travel.

“To be teleported would be to lose something.”

John Urry (in Adey & Bissel, 2010, p. 6)

### **Introduction**

The modern notion of clock-time, which gave conceptual foundation to the positivist ethos that shapes urban transport systems as a merely mechanical means of physical movement in space, is being increasingly put into question. The multiple uses of travel time, the diverging technological arrangements shaping commuter movement and new forms of social interaction that emerge in and through everyday mobility undermine both economic and societal assumptions that have backed up ‘time-saving’ approaches in transport appraisal. This Chapter addresses the relational considerations of travel time alongside social justice

concerns that arise in conjunction with emancipatory and discriminatory social encounters on the move. Following the ‘new mobilities paradigm’, we push for more explicit acknowledgement and comprehension of the experiential dimensions of travel time and an associated inquiry into the socially (dis)integrative aspects of everyday urban mobility. We approach processes of social interaction and identity formation from a social justice perspective and call for a rethink of time-saving approaches in transport appraisal. Last, but not least we suggest a politicization of transport planning by embedding articulations of difference and conflict in planning practices and an associated antagonizing of power relations in policy circles that perpetuate an unequal politics of time.

To these purposes section one introduces two ways of understanding urban movement – ‘mobility as means to an end’ and ‘mobility as end in itself’. Section two looks at utilitarian and instrumental considerations of travel time. Section three and four examine urban mobility as a domain of meaningful social experience and social encounter. Section five draws upon previous sections to develop a relational conceptualization of travel time. Section six points to new forms of social exclusion from and through urban mobility that arise from negative registers of communication and conflictive relations with others while on the move. Section seven concludes the paper and calls for a holistic understanding of urban mobility, as well as for embedding socially just considerations in public transport policy-making.

## **1. Mobility as ‘means to an end’ and ‘end in itself’**

Most transport analyses consider urban mobility as ‘means means to an end’- an instrumental tool for linking people to places where they perform economic, leisure, and consumption roles. However, questions of the impacts of urban mobility on the life of individuals have a long history in urban studies (e.g. Park, Burgess and McKenzie 1925; Wirth 1928; Massey and Denton 1993). First, urban mobility is addressed – from a socio-economic perspective - as means of access to goods and services. These analyses examine movement and mobility as critical to freedom, independence, access to work, education, health and leisure, and, as such, a requisite for intra- and intergenerational social mobility in the broader sense (Bergmann and Sager 2008; Social Exclusion Unit 2003). Such work is also being undertaken with a consideration of access to information and communication

technologies seen as both substitutive and complimentary to physical mobility (e.g. Lyons 2009; Hine and Grieco 2003; Durieux 2003). Second, urban mobility is considered as a condition for participating in various social networks, both bonding with families and friends, and bridging with other societal groups in the city (see: ‘network capital’ in Urry 2007).

These considerations have generated a strong interest with the social exclusion / inclusion problematic in regards to urban mobility which is now being intensively researched by transport geographers and transport planners in more systemic ways (e.g. Lucas and Stanley 2003; Hine and Mitchell 2003; Rajé, 2004; Kemming and Brinkmann 2007). Mobility exclusion arises from diverse factors such as physical barriers in the built environment, privatisation of public spaces, dispersal of facilities and services, as well as geographic, economic, and fear based exclusion, and time poverty (Church et al 2000). In turn it correlates with social isolation, estrangement, and, as such, undermines all forms of sociability including participation in civil organisations, local associations, and family life. Withdrawal of large numbers of people from broader society and the impacts of weakening social bonds in deprived neighbourhoods create further implications for levels of crime, and the assurance of social order in the city (Beckmann et al. 2007).

What compliments these considerations, and is a focus of this paper, is a recognition of urban mobility as ‘end in itself’. Such an approach - in the expanding work on ‘mobilities’ in particular - entails approaching travel time as time of meaningful social experience, and as a political site for identity formation and negotiation of social affinities (Urry 2007). The recognition of relationality between experienced urban mobility and identities of travellers breaks with consideration of mobility as dead time in favour of looking at the construction of individual subjects through transport systems, planning imaginaries (Richardson and Jensen 2008; Lévy 1999; Miciukiewicz and Vigar 2012) and ambiances of urban travel (Bissel 2010).

## **2. Utilitarian considerations of travel time**

More complex considerations of spatial mobility that go beyond understanding of urban travel as a derived demand have emerged in approaches to travel time over last three decades. The dominant trends in transport policy, that – drawing upon transport economics - have prioritised time savings over quality of travel time and other variables, have been

problematized and put into question from different angles of transport research. The widely cited thesis of Sheller and Urry (2006) that “time spent travelling is not dead time that people always seek to minimise” (p. 213) has been supported from a number of disciplinary and paradigmatic perspectives, and well empirically evidenced.

First, research within the discipline of economics itself has questioned the underpinnings of approaches to time in traditional transport modelling. Recent analyses in transport economics call for a departure from assigning a single standard economic value of time reduction towards more nuanced socio-economic analyses of values of travel time savings (VTTS). Amongst others, this includes researching different cognitive thresholds that apply to values assigned by travelling individuals to time savings depending on total length of journeys, forms of commuting and travelling, modes of transport (train, underground, bus, private car, etc), positioning of travellers in the socio-economic strata, work, leisure or consumption activities to which the trips are related, and sizes of time reductions (e.g. Jara-Diaz 1990; Galves and Jara-Diaz 1998; Hultkrantz and Mortazavi 2001; Karlstrom et al 2007). This resonates with work in behavioural economics that breaks with understanding of urban travellers as ideal utility-maximising actors in favour of examining more hidden, situational, subjective, and socio-subjective valuations of time and integrating them into systems of mathematical modelling (Small 1982; Winston 1987; Camerer and Loewenstein, 2004; Avineri and Prashker 2005). Such nuanced inquiry pushes for more complex treatment of time in transport economics, for greater inclusion of non-time attributes of travel such as security information or comfort in cost-benefit analysis, as well as builds more awareness among policy circles as to if, when and to what extent costs of time-saving associated with transport improvements can be passed on to travellers and commuters (e.g. Mackie et al. 2004; Metz 2008).

Second, challenges to the treatment of time in transport research have recently become more prominent in transport geography wherein a bulk of studies, that predominantly take utilitarian and instrumental approach to travel time, point to its positive and productive uses for the performance of activities – both work related and recreational – that are external (or parallel) to traveling itself. Although many policy documents still consider travel time mainly as a loss of working time and thus a cost to employers (e.g. DfT 2011), new empirical transport research along with studies on the use of ICTs unravel evidence of the growing economic productivity of activities performed while travelling, such as sending e-mails, calling clients and partners, reading documents or preparing presentations (Lyons and Urry

2005; Lyons et al. 2007; Jain and Lyons 2008). Utilities assigned to travel time by individuals differ in regards to means of transport and types of trips, but they have been evidenced for all forms of urban mobility. This recognition of utilitarian use of time in motion blurs boundaries between travel(-time) and activity(-time), and thus challenges dominant considerations of time as an economic cost of traveling that individuals would always seek to minimize and policy makers should, by all means, attempt to reduce (Lyons and Urry 2005). Accordingly, in regard to recreational uses of time Jain and Lyons (2008) and Mokhtarian et al. (2001) point to various leisure activities, such as reading, listening to music or playing games that are performed in means of transport. Last but not least, transport research in geography and planning suggests that travel time proves to be 'operational' also through carrying of new potentials for anti-activities, such as resting or daydreaming, which are not directly productive, but bring work-transferable benefits to individuals. Hence Jain and Lyons (2008) consider travel time as a 'gift' offered to a body of a traveller, which allows daily transfers between social roles and switching between bodily operation modes (Mokhtarian and Solomon 2001).

These innovative approaches to the utility of travel time in different transport research disciplines have challenged the speed-focused underpinnings of economic modelling that justify large infrastructural projects, and have made transport planners more aware of new opportunities arising from productive uses of travel time. On the one hand, transport policy can focus on a better use of the existing transport infrastructures and improvements to the quality rather than reduction of travelling time (Shaw et al. 2008). This could be done, for instance, by the delivery of more frequent and thus less congested urban rail or bus services and/or by investing in better designed and more technologically advanced vehicles that would provide work-enabling mobile environments (i.e. comfortable and well ICT-connected). On the other hand, and this is more likely to be the case, the research on productive uses of travel time might further reinforce the drive in policy-making to deliver new premium networks that would be both high-speed and work-enabling. Such an approach is considered a win-win strategy where time savings are combined with economic colonisation of travel time, and a push for public transport investment. But how 'public' that transport is seems to be a moot point. From a social justice perspective premium transport networks are seen foremost as fragmented and unbundled infrastructures (Graham 2000) that further disconnect and exclude 'mobility poor' populations and deprived neighbourhoods from network interactions, and produce socially and spatially splintered urban societies (Graham and Marvin 2001). The

divergence of high- and low-speed transport networks along with a series of facelifts and deteriorations of connected and disconnected neighbourhoods have been both key expressions and drivers of transformation of unitary cities into “two-track” urban systems in the Anglo-Saxon world (Soja 2010, MacRury 2008), where transport network liberalisation is more apparent, and – more recently - in continental Europe (Trip 2007; Rutherford 2008).

Next sections of this paper will focus on most recent approaches to travel time - brought forward by the ‘new mobilities’ research and forming core elements of the new paradigm – that go beyond utilitarian and instrumental understandings of (predominantly economic) utility of time. The following sections, which dwell on behavioural, emotional, and symbolic practices that are directly related to spatial mobility, will address travel time as a domain of meaningful experience for individuals and on societal implications of time spent travelling.

## **2. Travel time as a domain of meaningful experience**

The expanding work on mobilities has prompted an increased recognition of diverse cultural values and the practice of movement itself. This approach recognizes mobility as something that has its own intrinsic trajectories, performances, ambiances and affinities. What would one lose if one was teleported? S/he would lose meaningful travel time – the experience of movement and the experience of what happened on the move. This time is filled with different behaviours, reflexive and affective practices and emotions through which individuals establish relations with others and with the city. As opposed to the abovementioned utilitarian approaches in transport geography and planning, in the work on ‘new mobilities’ (see: Shaw and Hesse 2010; Cresswell 2010; Vannini 2010; Götz *et al.*, 2009) travel time is treated not as an empty container where activities external to travelling, such as reading or sending e-mails, can be accommodated, but as a dynamic assemblage of physical movement with activities intrinsic, related and parallel (or external) to it. For individuals the time spent on everyday commute offers a meaningful sphere of identity formation (Jensen 2009). The mingling moments of thinking, reading, viewing landscapes through the window, and looking at or listening to conversations of others while on the move, are crucial for the processes of sense making and positioning oneself within urban society. “Mobile, embodied practices are central to how we experience the world, from practices of

writing and sensing, to walking and driving. Our mobilities create spaces and stories – spatial stories.” (Cresswell and Merriman 2010, p. 5) On the one hand, the practices of movement - including the use of particular means of transport and certain routes or interchanges - are reflexively constructed and rooted in individuals’ values, interests, constraints and past experiences. On the other, in turn, the experiences coming from daily urban mobility take part in reshaping orientations of individuals towards the world and their behavioural modes of action. Hence, the travel time is ‘used’ by individuals – more or less consciously – for behavioural and symbolic interaction with ‘the environment’ and personal identity construction (Jensen 2010). Different performances of movement, such as walking, cycling or bus-riding are increasingly considered emancipatory practices through which individuals gain power to renegotiate meanings of self and the city. ‘New mobility’ work on forms of mobile empowerment - that often recalls the classic book of Michel de Certeau (1999) *The Practice of everyday life* – originated mainly from analyses of walking, wherein urban walks are seen as cunning tactical practices that cut across fixed spatial grammars of cities and bend pre-planned urban routes (e.g. Middleton 2009; Cresswell 2011), but a number of analyses capture also the emancipatory performances of cycling (Jones 2005), driving (Thrift 2004), and urban public transport usage (Jensen 2009; Jirón 2010).

The different qualities of travel time are experienced by individuals sometimes reflexively and discursively, but often through combinations of multi-sensual interactions between corporeal bodies and materialities of the mobile environment (Hannam et al. 2006). The urbanites’ bodies serve as ‘affective vehicles’ (Sheller and Urry 2006) whose sensual experiences are transformed into atmospheres and form ‘emotional geographies’ of urban travel. The emotional geographies may be sensually pleasant, joyful, passionate or sexual, but they might turn into misanthropic ambiences of frustration, discontent and aggression:

*“While the affective atmospheres are invisible, nonrepresentational, they form part of the ubiquitous backdrop of everyday life on the move. Rather than being inert, background, atmospheres are forceful, [...] and central to everyday conduct [...] since they facilitate and restrict particular practices and, in doing so, precipitate particular structures of feeling” (Bissel 2010, p. 272).*

Emotional geographies also play a crucial role in mediating both sensuous and reflexive relations between urbanites on the move and technologies that facilitate mobility. “Such sensuous geographies are not only located within individual bodies, but extend to

familial spaces, neighbourhoods, regions, national cultures” (Sheller and Urry 2006, p. 216). The nonrepresentational atmospheres and ambiences, which are considered forms of ‘sociable dwelling-in-motion’ (Sheller and Urry 2006), shape not only individual but also collective temporalities of travel.

### **3. The collective temporalities of travel**

Urban travel time is formed by a meshwork of multilayered and overlapping individually and collectively experienced temporalities. Although the relationality of these behavioural, reflexive, emotional and affective temporalities has often a ‘messy’ character (Hajer and Reijndorp 2001), it is a forceful vehicle of production and reproduction of urban societies. Amongst others, Lefebvrian rhythmanalysis (see: Lefebvre 1996) and de Certeau’s inquiry into tactical spatial practices (see: de Certeau 1999) rolled out powerful tools for exploring the role of temporal organization of movement in the making of cities (see also: Cresswell 2010; Middleton 2009). Not only the construction of individual identities and affinities, but also the processes of formation of collective identities, as well as the de-coding and re-coding of spatial grammars are entangled with the practices of movement, wherein time is considered as the fourth dimension of space. “People not only observe the city, whilst moving through it, rather they constitute the city by practising mobility. The meaning of places in the city is constituted by the movement as much as by their morphological properties”. (Jensen 2009, p. 140)

Collective travel temporalities, which emerge in different modes of urban mobility such as walking, driving or cycling, but foremost in the means of public transport, are constituted by a number of social and spatial practices. The specific interactions and forms of mobile sociability fall into two broad and sometimes overlapping categories: social encounters on the move and collective socio-spatial practices of navigation. The social encounters on the move comprise more or less conscious forms of social contact such as conversations on the bus, looking at and listening to conversations of others, as well as sensual affective relations between travelling bodies. The specific dynamics and rhythms of these relations are mediated by formal and informal norms (see: Watts and Urry 2008), individual beliefs and routines, and spatialities and temporalities of movement - such as waiting, changing platforms, getting on and the bus or train, finding a seat or being ‘mobile with’ (Jensen 2010) others in the carriage. These interactions between travelling bodies are complimented by socio-spatial practices of



navigation along and among fellow urban travellers: passing by, overtaking, giving way, congregating (Jensen 2010), but also cutting up, pushing or shoving (Bissel 2010).

Both social encounters on the move and practices of navigation among others, which are forms of intensive being with random others in very close proximity, carry powerful social potentials. “The notion of ‘social condensers’ in relation to urban travel is highly important and points in the direction of a less bounded and territorially delimited way of relating to places and other fellow humans. [...] The network and mobilities are reconfiguring our ‘sense of place’ and belonging” (Jensen 2009, p. 152). In the plurality of intimate encounters in motion - friendly and unfriendly, inclusive and exclusive, emancipatory and oppressive – different social groupings and whole urban societies renegotiate the existing, and produce the new forms of affinities and prejudices. What is more, the spatialities and temporalities of these societal relations are increasingly mediated by technological systems and institutional arrangements of public transport. The ‘armatures’ (Jensen 2009) of urban mobility, such as transport interchanges, rail tracks, ticketing machines, CCTV cameras, and ICT-fitted vehicles shape certain ‘time regimes’ of public transport and different experiences of travel time (Adey and Bissel 2010). These non-human actants (Latour, 2005) take active part in the processes of assembling not only people and places, but also individual, societal and technological temporalities (Adey and Bissel 2010; Jensen 2008).

#### **4. Towards time-space: relational reconceptualizations of travel time**

Rising complexity in the socio-technical assemblages of everyday urban mobility and growing awareness of their profound impacts on the daily lives of individuals and the formation of urban societies on the move, call for a reconceptualization of modern notions of time and temporality. Hence, the notion of clock-time, which gave conceptual and ethical foundations to the positivist ethos that has shaped urban transport systems, needs to be complimented with relational ideas of (travel) time.

The development of relational thinking about travel time within the mobilities’ paradigm has challenged Newtonian and Cartesian conceptualizations of time. First, the Newtonian tradition, which had been founded on the understanding of time as an absolute entity which has its own nature separate and independent from temporal human practices, has been gradually supplemented by relational approaches embracing utilitarian and experiential

values that individuals and social groupings assign to the practices of movement, and to instrumental and communicative activities performed on the move (Urry 2000). Second, the Cartesian notion of linear, measurable and symmetrical – broken into space-like units – mechanistic clock-time is being complimented with apprehension of multiple diachronic times that emerge in and through mobility (Urry 2000; Hannam 2006, Middleton 2009). This has also been conceptualized as a difference between represented time and experiential time-space (Crang 2001).

These relational approaches to time line up with reconsiderations of space in human geography and strategic planning whereby the Euclidean notion of absolute space - conceived by Descartes as continuous body, which had served traditional planning ideas and maintained the reductionist understanding of “cities as single, integrated, unitary, material objects” (Graham and Healey, 1999: 624) – has been surpassed by a relational notion derived from Leibniz’s theory of space (Madanipour 2010). Since ‘relational’ (Healey 2004, 2007; Amin 2004) and ‘folded’ (Jones 2009; MacCann and Ward 2010; Amin 2007) topologies surpass territorial and hierarchical thinking about space, intra- and interurban scales are conceived as ‘multilayered’ (Massey 2005) sites of interaction, wherein travelling knowledges, ideas and imaginaries are mobilized by different actors both within and across spatially bound territories. Relational planning practices – just as ‘new mobility’ analyses - turn towards an approach to qualities of spaces which is based not upon values intrinsic to objects (and ideal templates for these objects), but upon experiential values of these objects which are identified by perceiving, thinking and feeling subjects, “*Space and time are now dynamic qualities: when a body moves, or a force acts, it affects the curvature of space and time – and in turn the structure of space-time affects the way in which bodies move and forces act.*” (Hawking 1988, p. 33, cited in Urry 2000, p. 119).

The non-linear approach to qualitative temporality has a strong potential for progressive thinking about urban mobility. Both the movement itself and what happens on the move carry opportunities for individual emancipation, social connectedness and empowerment of urban communities. The ‘new mobility’ analyses bring therefore not only new ways of thinking about urban transport but also call for policy-makers to consider what exactly the mobile experience offers. This project entails: a deepening of a long-standing concern for a generalized service quality (e.g. Hine and Mitchell 2001; Uteng 2008); but goes further to think of transit spaces as public spaces, looking at who benefits from how these operate, and also to consider how we might value such considerations in regulatory and

investment decisions. The next section provides some pointers for this project through a consideration of the quality of time-spaces of urban mobility, looking particularly from a social justice perspective, at both inclusive and exclusive forms of social interaction on the move.

## **5. The gift and the curse of travel time**

New relational approaches unravel not only the spatio-temporal complexity of socio-technical assemblages of everyday urban mobility but also increasing socio-spatial splintering and fragmentation of cities wherein transport systems play both connecting and disconnecting roles (Graham and Marvin, 2001). We argue that the growing socio-spatial unevenness and cultural diversity of urban societies is projected onto and reinforced by transport systems and networks of human urban mobility. Time-spaces of urban transport constitute crucial 'social condensers' (Jensen, 2009) of urban life – always classed, gendered, sexualized and racialized - where physical movement, corporeal travel and bodily experience intersect with various forms of social interaction and identity formation. Practices of urban mobility put in motion processes where physical fabrics, social relations, actors, humans and non-humans are involved in complex and contingent processes of folding together or pulling apart. The constitution of urban public transport as sites of social encounter relates both to inclusive and exclusionary social practice. Experiential qualities of urban mobility carry connecting and disconnecting powers capable of placing and displacing particular urban travellers. This understanding of time-spaces of mobility as political sites rather than just homeostatic formations of the public domain in spaces of public transport points to conflictive and discriminatory politics of urban mobility. This section looks at how social relations in space contribute to mobility exclusion.

In increasingly diverse and unequal urban settings, for many people, urban travel time is linked with stress, unpleasant social encounter, and often an open conflict with others. This time, which for privileged urbanites, who enjoy benefits of ICT communications and comfortable spaces of resting and daydreaming is a 'gift', (Jain and Lyons 2008) for other groups, such as ethnic migrants, the homeless or mothers travelling with children, often becomes a 'curse'. While travel time, when 'mobile others' (Jensen 2008) from various walks of life come together to travel among others on a bus, cycling route, underground or form

together car traffic, this might serve as a laboratory of diversity and a “training ground for tolerance and openness to other people” (Runge and Becker 2007, p. 15); or it often turns into a battleground of discriminatory and hostile social practices, continuing class and racial prejudice, antisocial behaviour, and hate crime. The shortage, overcrowding and frequent delays on metropolitan transport create hostile affective registers of communication (Bissel 2010) between delayed and fatigued bodies of passengers. Events when the vulnerable travellers get marked out, threatened, and verbally or physically abused on public transport are intrinsic part of their everyday mobility and a source of continuous distress. Moreover, moments when a bus drives past while they are waiting at a bus stop or when they are refused entry constitute recurrent reminders of limited rights and life opportunities.

We consider time-spaces of urban mobility as political sites of the everyday, where both inclusive and discriminatory practices are not only enacted, but also reshaped through different events, encounters, and processes. The negative ambiances on public transport are a result not only of prejudices towards different groups of people and discriminatory discourses disseminated by mass media, but also come into being through processes inherent to public transport itself. The under-provision of services reinforces fatiguing effects of everyday commutes, which turn into negative atmospheres that trigger small acts of violence and more serious expressions of outrage. Last but not least, the over-presence of visual campaigns – often really important and justifiable – which aim at fostering anti-terrorist surveillance, reduction of misbehaviour and crimes of different sorts, such as fare dodging, ‘spit and run’ or benefit fraud, adds to an atmosphere of distrust, suspicion, hostility and a negative affective charge which might result in expressions of negative emotions towards those who fall into different categories of potential suspects. As a result, the conflictive social encounter not only causes high level of stress for urban travellers, but also prevents individuals and groups from using certain modes of transport and, as such reinforces their time-based (e.g. peak services, evening services) or spatial (e.g. underground, complex interchanges) *exclusion from* public transport. This, in turn, might become a source of further marginalisation of whole groups or categories of people who cannot take part in various networks of interaction as a result of socio-spatial *exclusion through* suppressed urban mobility.

## **6. In conclusion: towards a holistic and socially just concept of urban mobility**

Recognising the experiential qualities of time-spaces of mobility, wherein individual subjects, social relations and places are shaped through movement, calls for a rethinking of the theoretical foundations in the disciplines of transport geography and transport planning, as well as transport planning practice. This means a move from instrumental, utilitarian and deterministic understandings of urban transport towards a holistic conceptualisation of urban mobility, embedding social qualities of urban travel in urban planning and design. Such an approach also entails a reconsideration of concepts of time in transport planning. While mainstream transport planning approaches, which employ Cartesian concepts of time, focus on speed and efficiency, and prioritise time-savings, holistic understandings of mobility as spatiotemporal relational practice requires mobilising multiple perceptions and experiences of time and different temporalities of space emerging in everyday mobility. Such an approach entails the treatment of time-spaces of urban travel not as realities on their own, but as realities framed through social and institutional practices, bureaucratic time frames, discursive and affective modes of communication and bodily experience.

Embedding social justice in transport systems constitutes one key aspect of the holistic conceptualisation of urban mobility. This requires innovative mobilization of concepts of time and space in a search for more socially inclusive networks of human urban mobility. While engaging with experiential quality of travel time and identity formation on the move, mobilities research has opened up avenues for analyzing and putting in motion culturally emancipative, and socially integrative practice. At the same time, however, mobile encounters may – and often do – carry a disruptive, disintegrative potential. This - particularly classed, gendered and ethnic – apprehension of urban travel shows how different social relations are performed on the move, and how these relationships are shaped through particular mobility situations. In unequal urban settings where socio-cultural conflicts coexist with underprovision of transport services, experiential time often constitutes yet another layer of social exclusion.

Foremost, the conflictive topology of experiential travel time calls for research and policy approaches that would work in favour of improving the quality of social interactions on urban transport networks. While poor design of public transport vehicles, interchanges and services, pricing policies, and spatial distribution of services in cities have been widely addressed in accessibility planning, fear- and social discomfort-based exclusion of certain social groups has been only partially examined by transport researchers and policy-makers,

and then often only within frameworks of crime prevention and control. More in-depth research is needed into persistent risks, anxieties, discomforts and traumatic experiences that exclude certain groups both from and through performing mobility, as well as into where and how hostility develops, how it is expressed, and how its effects are felt. With new insights on social exclusion, an array of understandings of mobility constraints and suppressed journeys emerge ranging from alienation, disenfranchisement, capability loss, distress related to potential and experienced discriminatory encounters in space.

What is the way forward then? While the new mobilities paradigm exposes the experiential dimensions of travel time, recent analyses in transport geography (e.g. Hine and Mitchell, 2003; Rajé, 2004) and planning offer fully-fledged systemic ways of inquiry into social justice concerns. From a research perspective, complementarities and synergies between the two strands of thought should be explored in order to better address “links between transport activities on the one hand, and their socio/cultural/political meanings and representations, and corporeal and (en)gendered experiences on the other” (Shaw and Hesse 2010, p. 307). For this purpose, a mix of quantitative and qualitative methods is needed to address both traditional - i.e. economic and time-poverty related - forms of transport exclusion and more subjective, experiential mobile (dis)connectors. Such an effort would expose the unequal ‘politics of mobility’ (Cresswell 2010) that operates in and through transport networks. Last but not least, the deciphering of the politics of mobility should serve as a vehicle for embedding more complex articulations of difference and conflict in the practice of planning, and thus further politicize transport policy-making practices and often hidden behaviours and biases in society and planning practice. Such a politicized transport planning would not only search for a balance between time savings, utilitarian uses of travel time, and experiential socially (dis)integrative qualities of time, but also antagonize the existing power relations within policy circles to ensure the socially just - both in quantitative and in qualitative terms - distribution of travel time in transport appraisals. This would expose the transport planners not as morally neutral technicians but as practitioners engaged in moral and ethical questions posed through policy design, evaluation and implementation.

## **References:**

- Adey, P. & Bissel, D. (2010) Mobilities, meetings, and futures: an interview with John Urry. *Environment and Planning D: Society and Space* 28, 1-16.
- Amin, A. (2004) Regions unbound: towards a new politics of place. *Geografiska Annaler*, 86B, 33-44.
- Amin, A. (2007) Re-thinking the urban social, *City*, 11, 100–114.
- Augé, M. (1992) *Non-lieux. Introduction à une anthropologie de la surmodernité*. Paris: Le Seuil.
- Avineri, E. & Prashker, J. (2005) Sensitivity to travel time variability: travelers' learning perspective. *Transportation Research Part C*, 13(2), 157–183.
- Beckmann, K. J., Bracher, T., and Hesse, M. (2007) Mobility and Deprived Urban Neighbourhoods in the Focus of Integrated Urban Development Policy. *Deutsche Zeitschrift für Kommunalwissenschaften*, 46(2)..
- Bergmann, S., & Sager, T. (Eds) (2008) *The Ethics of Mobilities: Rethinking Place, Exclusion, Freedom and Environment*. London: Ashgate.
- Bissel, D. (2010) Passenger mobilities: affective atmospheres and the sociality of public transport, *Environment and Planning D* 28, 270-289.
- Camerer, C. & Loewenstein, G. (2004) Behavioural economics: past, present and future. In: C. Camerer, G. Loewenstein and M. Rabin (Eds) *Advances in Behavioural Economics* (pp. 3–52). Princeton, NJ: Princeton University Press.
- Castells, M. (2001) *The Rise of the Network Society*. Oxford: Blackwell.
- Certeau, M., de (1999). *The Practice of Everyday Life*. Berkeley, Los Angeles and London: University of California Press.
- Church, A. et al. (2000) Transport and social exclusion in London. *Transport Policy*, 7,195-205.
- Cragg M. (2001) Rhythms of the city: temporalised space and motion. In J. May and N. Thrift (Eds) *Timespace: Geographies of Temporality* (pp. 187-207). London: Routledge.
- Cresswell, T. (2010) Towards a politics of mobility, *Environment and Planning D: Society and Space* 28, 17-31.
- Cresswell, T. (2011) Mobilities I: Catching up. *Progress in Human Geography*, 35(4), 550–558.

- Cresswell, T. & Merriman, P. (2010) Introduction: Geographies of Mobilities – Practices, Spaces, Subjects. In T. Cresswell and P. Merriman (Eds) *Geographies of Mobilities – Practices, Spaces, Subjects*. Farnham: Ashgate.
- DfT (2011) *Values of Time and Operating Costs*. London: Department of Transport, Transport Analysis Guidance (TAG) Unit 3.5.6.
- Durieux, D. (2003) *ICT and social inclusion in the everyday life of less abled people*. Liege and Amsterdam: University of Liege and ASCoR.
- Galves, T. & Ara-Diaz, S. (1998) On the social valuation of travel time savings. *International Journal of transport economics* 25, 205-219.
- Geurs, K. T., Boon, W. & Van Wee, B. (2009) Social Impacts of Transport: Literature Review and the State of the Practice of Transport Appraisal in the Netherlands and the United Kingdom. *Transport Reviews*, 29(1), 69–90.
- Götz, A., Vowles, T and Tierney, S. (2009) Bridging the qualitative-quantitative divide in transport geography. *The Professional Geographer*, 61, 323–335.
- Graham, S. (2000) Constructing Premium Network Spaces: Reflections on Infrastructure Networks and Contemporary Urban Development, *International Journal of Urban and Regional Research*, 24(1), 183-200.
- Graham, S. & Healey, P. (1999) Relational Concepts of Space and Place: Issues for Planning Theory and Practice. *European Planning Studies*, 7(5), 623-646.
- Graham, S. & Marvin, S. (2001) *Splintering Urbanism. Networked Infrastructures, Technological Mobilities and the Urban Condition*. London: Routledge.
- Green, E. & Singleton C. (2006) Risky Bodies at Leisure: Young Women Negotiating Space and Place. *Sociology*, 40, 853-871.
- Hajer, M. & Reijndorp, A. (2001) *In search of New Public Domain*, Rotterdam: Nai Publishers.
- Hannam, K., Sheller, M. & Urry, J. (2006) Editorial: Mobilities, Immobilities and Moorings. *Mobilities*, 1(1), 1-22.
- Hawking, S (1988) *A Brief History of Time*. New York: Bantam Books.
- Healey, P. (2004) The treatment of space and place in the new strategic spatial planning in Europe. *International Journal of Urban and Regional Research*, 28(1), 45-67.
- Healey, P. (2007) Urban Complexity and Spatial Strategies. *Towards a relational planning for our times*. London and New York: Routledge.



- Hine, J. & Mitchell, F. (2001) Better for Everyone? Travel Experiences and Transport Exclusion. *Urban Studies*, 38(2), 319–332.
- Hine, J. & Grieco, M. (2003) Scatters and clusters in time and space: implications for delivering integrated and inclusive transport. *Transport Policy*, 10, 299–306.
- Hine, J. & Mitchell, F. (2003) *Transport Disadvantage and Social Exclusion*. Ashgate: Aldershot.
- Hultkrantz, L. & Mortazavi, R. (2001) Anomalies in the Value of Travel-Time Changes. *Journal of Transport Economics and Policy*, 35(2), 285-300.
- Jain, J. & Lyons, G. (2008) The gift of travel time. *Journal of Transport Geography*, 16(2), 81-89.
- Jara-Diaz, S. (1990) Consumer's surplus and the value of travel time savings. *Transportation Research B* 24, 73-77.
- Jensen, O. B. (2008) 'Networked Mobilities and Performative Urban Environments'. Keynote Paper for the conference 'Space, Interaction, Discourse', Alborg, November 12-14, 2008.
- Jensen, O. B. (2009) Flows of Meaning, Cultures of Movements - Urban Mobility as Meaningful Everyday Life Practice, *Mobilities*, 4(1), 139–158
- Jensen, O. B. (2010) Negotiation in Motion: Unpacking a Geography of Mobility *Space and Culture*, 13(4), 389–402.
- Jirón, P. (2010) Mobile Borders in Urban Daily Mobility Practices in Santiago de Chile, *International Political Sociology*, 4(1), 66–79.
- Jones, M. (2009) Phase space: Geography, relational thinking, and beyond. *Progress in Human Geography*, 33(4), 487–506.
- Jones, P. (2005) Performing the city: a body and a bicycle take on Birmingham, UK. *Social & Cultural Geography*, 6(6).
- Karlstrom, A., Eliasson, J. & Levander, A. (2007) On the theoretical valuation of marginal business travel time savings. Paper presented at 'European Transport Conference 2007', Leeuwenhorst Conference Centre, The Netherlands, 17-19 October 2007.
- Kemming, H. & Brinkmann, W. (2007) *Verkehrsverhalten sozialer Gruppen: Soziale Aspekte der Mobilität*. Dortmund: Institut für Landes- und Stadtentwicklungsforschung und Bauwesen des Landes NRW.
- Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford and New York: Oxford University Press.

- Lefebvre, H. (1996). "Elements of Rhythmanalysis. In E. Kofman and E. Lebas (Eds) *Writings on Cities. Henri Lefebvre*. Oxford and Cambridge, MA: Blackwell.
- Lévy, J. (1999) *Le tournant géographique*. Paris: Armand Colin.
- Lin, J. (2002) Gentrification and transit in north-west Chicago. *Transportation Quarterly*, 56(4), 175–191.
- Lucas, K. & Stanley, J. (Eds) (2003) International Perspectives on Transport and Social Exclusion. *Transport Policy*, 10(3), 89-142.
- Lyons, G. (2009) The reshaping of activities and mobility through new technologies. *Journal of Transport Geography*, 17, 81-2.
- Lyons, G., Jain, J. & Holley, D. (2007). The use of travel time by rail passengers in Great Britain. *Transportation Research Part A: Policy and Practice*, 41(1), 107-120.
- Lyons, G. & Urry, J. (2005). Travel time use in the information age. *Transportation Research A*, 39, 257-276.
- MacCann E. and Ward K. (2010) Relationality/territoriality: Toward a conceptualization of cities in the world, *Geoforum* 41, pp. 175–184.
- Mackie, P.J., Wardman, M., Fowkes, A.S., Whelan, G., Nellthorp, J. and Bates, J. (2003) *Values of Travel Time Savings UK*. Leeds: Institute of Transport Studies, University of Leeds: Working Paper 567.
- MacRury, I. (2008) The airport next door; London City airport – regeneration, communities and networks. In P. Cohen and M. J. Rustin (Eds) *London's Turning: The Making of Thames Gateway* (pp. 239-260). London: Ashgate.
- Madanipour A. (2010) Connectivity and contingency in planning. *Planning Theory*, 9(4), 351-368.
- Massey D. (2005) *For Space*. London: Sage.
- Massey, D. & Denton, N. (1993) *American Apartheid: Segregation and the Making of the Underclass*. Cambridge: Harvard University Press.
- Metz, D. (2008) The Myth of Travel Time Saling. *Transport Reviews*, 28(3), 321–336.
- Miciukiewicz K. & Vigar G. (forthcoming, 2012) Mobility and social cohesion in the splintered city: challenging technocentric transport research and policy-making practices, *Urban Studies*, 49(6)
- Middleton, J. (2009) 'Stepping in time': walking, time, and space in the city. *Environment and Planning A*, 41, 1943-1961.
- Mokhtarian, P.L. & Salomon, I. (2001). How derived is the demand for travel? Some conceptual and measurement considerations. *Transportation Research A*, 35, 695-719.

- Mokhtarian, P., Salomon, I. & Redmond, L.S. (2001). Understanding the demand for travel: It's not purely derived. *Innovation*, 14, 355-380.
- Park, R. E., Burgess, E. & McKenzie, R. (1925) *The City*. Chicago: University of Chicago Press.
- Rajé, F. (2004) *Transport, Demand Management and Social Inclusion, The Need for Ethnic Perspectives*. Ashgate: Aldershot 2004.
- Richardson, T. & Jensen, O.B. (2008) How Mobility Systems Produce Inequality: Making Mobile Subject Types on the Bangkok Sky Train. *Built Environment*, 34(2), 218-231.
- Runge, D. & Becker, H-J. (2007) Mobility and Social Cohesion. Berlin: TU Berlin, Schriften des Fachgebietes Integrierte Verkehrsplanung des Institutes für Land- und Seeverkehr an der Technischen Universität Berlin 17, 1-53.
- Rutherford, J. (2008) Unbundling Stockholm: The networks, planning and social welfare nexus beyond the unitary city. *Geoforum*, 39(6), 1871–1883.
- Shaw, J. & Hesse, M. (2010) Transport, geography and mobilities, *Transactions of the Institute of British Geographers*, 35 (3), 305-312.
- Shaw, J., Knowles, R. & Doherty, I. (2008) Introducing Transport Geographies. In: R. Knowles, I. Doherty, and J. Shaw, J. (Eds) *Transport Geographies: mobilities, flows and spaces*. Oxford: Blackwell.
- Sheller, M. & Urry, J (2006) The new mobilities paradigm, *Environment and Planning A*, 38, 207-226.
- Small, K. (1982) Scheduling of consumer activities: Work trips. *American Economic Review*, 72, 467-479.
- Soja, E. (2010) *Seeking Spatial Justice*. Minneapolis and London: University of Minnesota Press.
- Thrift, N. (2004) Driving in the City. *Theory Culture Society*, 21, 41-59.
- Tripp, J. J. (2007) *What Makes a City ? Planning for 'Quality of Place': The Case of High-speed Train Station Area Redevelopment*. Amsterdam and Delft: Delft University Press.
- Urry, J. (2000) *Sociology Beyond Societies: Mobilities for the Twenty-First Century*, Routledge. London and New York: Routledge.
- Urry, J. (2007) *Mobilities*. Cambridge and Malden, MA: Polity Press.
- Uteng, T. P (2008) Gendered mobility: a case study of non-Western immigrant women of Norway. In: S. Bergmann and T. Sager (Eds) *The Ethics of Mobilities: Rethinking Place, Exclusion, Freedom and Environment*. London: Ashgate.

- Watts, L. & Urry, J. (2008) Moving methods, travelling times. *Environment and Planning D: Society and Space*, 26(5), 860-874.
- Vannini, P. (2010) Mobile Cultures: From the Sociology of Transportation to the Study of Mobilities, *Sociology Compass*, 4(2), 111-121.
- Winston, G. C. (1987) Activity choice: A new approach to economic behavior. *Journal of Economic Behavior and Organization*, 8, 567-585.
- Wirth, L. (1928) *The Ghetto*. Chicago: University of Chicago Press.