

Transport research and social cohesion in the splintered city: toward a progressive urban mobility agenda for Europe

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Abstract

The paper examines how urban transport systems shape, and in turn are shaped by, urban systems, social interaction, and everyday experience in increasingly polarised cities wherein unequal opportunities for mobility need to be seen as part of wider societal problems. We assess how social cohesion is addressed in research and produced in European cities in the interactions between public institutions, transport systems, travelling urban populations, and changing urban landscapes. We then discuss major problems and shortcomings experienced in the intersections between urban transport research, particularly emanating from the European Commission, and transport policy. Finally, we propose elements of a new urban mobility agenda to address current research challenges and to better foster urban social cohesion.

Keywords: urban transport; mobility; social cohesion; transport research; transport policy.

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Introduction

The ability to access everyday goods and services, and interact with other people is a fundamental building block of a cohesive urban environment. Urban mobility not only allows access to city resources but also shapes the everyday experience of the city and society. Transport systems are produced within different socio-political regimes underpinned by various transport planning and policy agendas, discourses, and practices. At the same time, urban transport networks frame mobility opportunities of individuals, and thus shape social practice and networks of human interaction within various spheres of the city.

Mobility opportunities are unevenly distributed among social groups and across the space of the city. This is nothing new but a number of trends have compounded such tendencies. Privatisation, deregulation and marketisation processes in urban service provision have led to more differentiation in access to services often now more greatly mediated by an ability to pay (Graham and Marvin, 2001). Graham and Marvin's idea of a 'Splintered City' points to an increasingly polarised city wherein the opportunities for mobility and the environmental externalities arising from it through the creation of premium networks etc are more unevenly distributed among populations. The result is often whole neighbourhoods that exhibit

problems of connectedness in relation to employment, consumption, leisure, and social life. While this is not unexpected, even inevitable, acknowledging that transport infrastructure and services remain both key drivers and reinforcers of social exclusion is often absent from urban policy discussions and research. We argue that such an absence is perpetuated by issues in the technocracy where research and planning practitioners cling to traditional transportation planning processes which value the time of the already mobility rich over that of the mobility poor (Whitelegg 1997; Banister 2005)

In this paper we examine how physical urban transport systems remain fundamental to the shaping of cities. We focus on the socio-economic, cultural, and political dimensions of social cohesion outlined by Novy et al. (this Special Issue a). We shed light on how social cohesion is addressed both in research and manifest in European cities in the interactions between public institutions, transport systems, travelling urban populations, and changing urban landscapes. In doing so we address the following questions: Does transport research (in a diversity of disciplines) embrace the issue of social cohesion in its various dimensions? How is urban cohesion considered in the dominant methodologies associated with the consideration of transport policy? How can social cohesion be fostered through innovative transport research and policy? In addressing these questions the first section looks at research in the area of social cohesion

and urban transport; sections two and three discuss the major problems and shortcomings of this research and policy; the last section proposes a new urban mobility research agenda to address the challenges of social cohesion more fully and set possible directions for transport research.

1. Social cohesion and urban transport research: an historic overview

Issues of social cohesion with regard to urban transport have a long history of research under various disciplines from economics and engineering to human geography, sociology and cultural anthropology. Questions of urban inequality and socio-spatially inequitable distribution of mobility contingencies have been present in urban sociology since the classical works of the Chicago school (e.g. Park, Burgess and McKenzie, 1925; Wirth, 1928) and are continued within gentrification studies (e.g. Lin, 2002; Danyluk and Ley, 2007), as well as in ethnic and racial studies (e.g. Massey and Denton, 1993; Canon 1998). This latter field begins to overlap with work in the environmental justice field which, since the 1960s, has highlighted how low income urban neighbourhoods suffer a greater than average exposure to the noise, pollution and environmental hazards resulting from the transport choices of others while

also having fewer mobility opportunities themselves (Whitelegg, 1997; Vasconcellos, 2001). The greater exposure of poor populations - that are more likely to live under flightpaths, busy rail infrastructure, and motorway junctions - to road accidents and environmental hazards has recently become particularly severe in Eastern Europe and the Global South, where rapid motorisation was not followed by major road improvements and freight transport corridors can be especially problematic when they cut across urban areas (cf. Ministerstwo Infrastruktury, 2004; Czapiński and Grzelak, 2007; Pucher et al., 2007). Urban planning processes of the mid and late Twentieth century were culpable in exacerbating these issues as large scale social housing was constructed on urban peripheries, often poorly connected to centres of urban commerce.

Methodologically, the effects of these processes have been captured by researchers, sometimes using time-space analysis influenced by geographers such as Torsten Hägerstrand (1974, 1975), which point to the differences in opportunities for various social groups depending on the locational characteristics of home and their access to transportation technologies, particularly the private car. Such a tradition continues in contemporary lifecycle analysis through the work of, among others, Grieco and Macdonald (2007) and Jarvis (2005). The social distribution of mobility opportunities and externalities arising from it is still relevant to the discipline and catalyzes grassroots

initiatives in Europe, the US, Canada, Australia, and the developing world (see Swyngedouw and Cook, this Special Issue).

In transport studies itself, the interest in social cohesion was for many years limited to equity issues understood as the fulfilment of basic needs of vulnerable populations (unemployed, elderly, people with disabilities, single-parent families, etc.). To some extent in more recent studies the focus on social equity has shifted to analyses of social exclusion and inclusion. In both cases however we see a dominant trend toward fragmenting societies into groups such as the elderly with a parallel promotion of a solution such as community transport. This drift toward a 'single-problem single-answer' way of thinking has held back a richer understanding of the multiple ways in which transport and mobility issues are implicated in broader processes of social cohesion. With this in mind the social exclusion / inclusion problematic 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). However, how far such research has changed the dominant practices of those in transport research and practice communities is a moot point. As Goodwin (1997, p. 9) concludes, several decades of methodological development have created an analytical toolbox that is "bright, impressive, of unchallengeable intellectual achievement, and wrong".

The recognition of multidimensional links between urban mobility and broader societal issues is now becoming more explicit both among transport researchers and social scientists. Urban mobility is increasingly regarded not only as, in the economists' terms, a derived demand, a means of fulfilling basic needs, but also - in the expanding work on 'mobilities' in particular - as an end in itself (e.g. Urry, 2007). This compliments the recognition of movement and mobility as a critical key to freedom, independence, access to work, education, health, leisure, and, as such, a prerequisite for intra- and intergenerational social mobility in the broader sense (Bonß and Kesselring, 2001; 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; Zinnbauer, 2007). Such research attempts to capture how urban mobility inequalities affect not only particular households, but also prove to be disruptive for community life and social capital at the local level. Mobility exclusion correlates with social isolation, estrangement, and, as such, undermines all forms of sociability including participation in civil organisations, local associations, and family life (Preston and Rajé, 2007; Häußermann, 2000). Such a 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, Bracher and Hesse, 2007a, 2007b).

These complexities aside, the first step towards a progressive research and policy is in defining individual exclusion arising from or compounded by physical mobility issues. Church et al. (2000) provide a useful seven-fold categorisation of the ways in which social exclusion arises, which include factors relating both to spatial and social accessibility: 1) existence of physical barriers in the built environment caused by transport infrastructure; 2) geographic exclusion of those who are often forced to live in peripheral urban neighbourhoods; 3) dispersal of facilities and services (e.g. schools and hospitals) to locations badly serviced by public transport; 4) economic exclusion of those who cannot afford rising public transport fares; 5) time poverty, often arising from the need to undertake care responsibilities and compounded by distance from services or poor public transport services; 6) fear-based exclusion of groups who feel particularly vulnerable on transport networks or using public spaces at all, or at least at certain times; and 7) exclusion from privatised and semi-privatised public spaces in the city. These factors encompass large swathes of the population and disproportionately affect certain groups according to age, ethnicity and gender among other variables.

Mobility poverty belies an inequality of opportunity that takes subtle and hidden forms. In gender terms for example women suppress journeys associated with personal health care to fulfil other roles and demands in time-poor situations (Pearson et al., 2007). These issues present methodological challenges that are very rarely grasped by mainstream analyses and are far from the norm among the methods that characterise the transport discipline and European Commission Transport Research in particular. It is to an analysis of this substantial body of research that we now turn.

2. European Commission transport research

EU funding from various Directorates-General for transport research has been substantial in the past two decades, and we argue has done much to perpetuate and maintain dominant research paradigms, to the detriment of social cohesion issues. This research has generated a great deal of *output*, to the extent that it itself demands various forms of meta-analysis, through the Transport Research Knowledge Centre for example, to distil it for users. There is no doubt also that it has helped advance thinking and knowledge in many areas particularly with regard to various technologies such as telematics applications. But it also has significant gaps, is driven by particular disciplinary

areas, fetishes best practice without a deeper understanding of the contexts of such practice (we discuss this in section 3), and thus distorts the European research field by funding some things at the expense of others. In general much of the research is dominated by a technology focus, such as through research on materials, fuel technologies, telematics, incremental improvements to public transport systems etc.

Some research has directly addressed social inclusion issues. Several RTD and Interreg projects addressed the deployment and promotion of flexible transport services, such as shared taxis, carpooling, and car sharing, and Demand Responsive Transport (DRT) services targeted at the transport needs of mobility poor populations. These projects have been useful, not least in the places where the research, often intimately tied up with demonstration projects, has been undertaken. But there is also something lost if complementary research is not forthcoming that treats cohesion in a more systemic way as the literature cited in section one suggests. The work on road pricing offers another example. Despite intentions to redistribute eventual road fares on public transport and 'green travel', special services for less abled populations, proposed pricing policy agendas were not, however, clearly linked with comprehensive strategies for enhancing socially and environmentally

sustainable urban transport and overlooked the fact that most journeys are inherently multi-modal.

Several research projects clustered within Land Use and Transportation Research (LUTR), which focused mainly on the links between urban mobility, spatial planning and environmental sustainability, made an explicit contribution to social cohesion research in its various dimensions (Novy et al., this Special Issue a). Although social issues, such as equity, health, security and fear were considered as being important, these projects have also not provided an integrative analytical framework for social cohesion and failed to operationalise social values (Kaufmann and Risser, 2004). Where a step forward in researching the impacts of urban transport on social exclusion and inclusion has been made e.g. Council of Europe (2005), PROPOLIS (Latuso et al., 2004) and MATISSE (2003), there seems to have been little influence on subsequent EC research, policy or disciplinary practices.

Such change is evident where EC research has usefully explored how to green the transport sector, often allied to attempts to promote a modal shift from private cars to greener modes of transport (e.g. ECOCITY). The social cohesion agenda, however, has been crowded out by attempts to 'green' the transport sector. While social cohesion agendas and green agendas often overlap, this is by no means guaranteed although this often appears to be

assumed by research projects and programmes. We would argue that sustainable city debates have been interpreted narrowly in research programmes with the social dimension ignored or subsumed into a green agenda, focused on climate change, carbon reduction and energy in particular. After some pioneering work in urban transport research for policy-making that had a deep sense of cohesion behind it in the early 1990s this was largely crowded out in the last 10-15 years by a focus on greening and carbon reduction in particular: the 'green' – being supported by 'middle class social justice' movements - has supplanted the 'red' in research. This combined with the technology fixation and the narrow modelling work cited earlier implies that very few analyses have systematically addressed how investment patterns from public and private sectors work, individually and collectively, to favour certain social groups and certain localities and thus how social justice is achieved in the field of mobility and transport investment specifics in particular.

3. Social cohesion in transport policy and policy-oriented research

A great deal of work spread over several framework programmes has attempted to aid policy-makers by focusing on institutional questions of policy

implementation in the transport field. A normative driver of this is typically to implement policy packages that are more environmentally friendly with cohesion issues sometimes addressed, and sometimes addressed well as e.g. in CAPTURE (1999). There have been only preliminary, incomplete, Europe-wide attempts to assess the implementation gap of urban transport planning support tools as in Land Use and Transportation Research (LUTR) cluster projects or in the ECMT (2002) study on implementing sustainable urban travel policies.

Central to such positive developments have been city networks, such as the POLIS network of European cities and regions or European Metropolitan Transport Authorities network, who have collaborated to develop innovative technologies and policies for local transport for twenty years. EUROCITIES has a strong presence in work on mobility through the CIVITAS Initiative, wherein over 40 cities and towns in the EC influence, support and evaluate the implementation of integrated sustainable urban transport (e.g. EUROCITIES, 2007). Such networks also provide arenas for dialogue and co-operation over the longer-term, an essential pre-requisite for understanding the contexts in which best practice might be learned and transferred (Stead et al., 2007).

Such work feeds into the fine words contained in several European Commission and Council of Europe documents that highlight urban mobility

issues (e.g. COM, 2001; ECMT/CM, 2001; COM, 2007). Social cohesion issues (e.g. basic passenger rights or problems of passengers with reduced mobility) are reflected in guidance for national and local transport policy agendas, and key principles for supporting public transport are set out. It must be said, however, that there is little evidence that these documents influence much national and local practice. Further, despite considering socially cohesive urban transport as important, they are rather silent on the social implications of the polarisation of mobility opportunities in cities across Europe, especially while other EU policies and programmes often act against such objectives as through infrastructure supply they widen the possibilities for the mobility-rich. More generally it is well-known but rarely acknowledged that new and existing transport infrastructures are demanded and unevenly exploited by wealthier groups. The equity implications of such spending is rarely recognised or exposed to public scrutiny. Most governments have elaborate systems for assessing projects against a small number of outcome objectives, one of which nearly always equates with social cohesion. That said, such objectives rarely appear to shape investment programmes strategically and at a project level cost benefit techniques still operate in arguably inequitable ways (e.g. time delays to car users are systematically costed higher than those using other forms of transport for example). And thus it is here in the everyday path-dependent

practices where change is necessary if cohesion questions are to be taken seriously.

Thus we concur with the main conclusion of a recent assessment of research gaps impeding urban transport innovation in Europe as part of FP6 project NICHES (2005). There is no lack of tools, or of knowledge of policy (packages) that might be cohesion-promoting. Rather, it is the failure to utilise the tools and knowledge in many practice contexts that is the issue. The report also cites the lack of inter-sector cooperation in current research activities as a major barrier to progress with research programmes proceeding with little acknowledgment of each other. One of the major reasons for the failure of policy-makers to utilise studies on social cohesion is a lack of interdisciplinarity across the boundaries that separate transport research within engineering, economics, transport studies from social science, on the one hand, and fundamental science from the applied research, on the other hand (Graham and Marvin, 2001). Although there is a vast literature on social aspects of transport systems in social research, and progressing body of knowledge on social cohesion in contemporary transport geography, it is not being utilised by policy-makers who tend to rely on commissioned policy-oriented studies. Rather than explore the diversity of urban contexts and the lives within them across Europe, get new insights, and perhaps even fully-fledged approaches,

transport policies are often based on ‘commonsense’ assumptions underpinning economic modelling and technological development (DfT, 2004). Within this There is a strong influence of often highly quantitative cost-benefit analysis and a focus on new transport technologies, procedures, and products. Hence, “the notion of the universal, disembodied subject, which has shaped transport policy fails to present individuals as participants in a range of activities across different locations” (Hine and Mitchell, 2001, p. 330).

In a similar vein, the obsession with best practice and toolkits, while useful as a starting point, often fails to translate to the diversity of situations European policy-makers find themselves in. Thus policy agendas for socially cohesive transport are being discussed on various scales from local to city, national and European level, often through scenario development and testing using a lot of best practice examples, particularly on the local and city scales. But there is little attention to the dynamics of context, and thus transferability, as well as to political rationalities, governmental technologies of implementation, and interests of particular groups favouring certain transfers (Bulkeley, 2006).

Relatedly, despite considerable development in recent years, policy evaluation mechanisms often experience serious problems in addressing broader socio-economic issues. The disconnection of transport policy from

social analyses makes counteracting social exclusion in the field of transport much more difficult. Transport, and the absence of mobility, constitutes a significant factor in all forms of exclusion. In most cases social expertise, when being referred to, is being narrowly and quite instrumentally mobilised in transport policy either as a survey tool for evaluation of existing and proposed legal and technological transport improvements or as a practical knowledge for influencing change of behavioural patterns. Critical reflection on social cohesion issues related to urban transport requires intensified efforts to develop theoretical frameworks for integration of existing qualitative and quantitative empirical studies presently dispersed across a variety of disciplines and traditions, and inclusion of transport problems into more general debates on society and space relations within social theory.

4. Mobilising and deepening the social cohesion concept in urban transport research

To address these issues, we argue for an integrative research agenda that is more sensitive to socio-political contexts and promotes social cohesion to the heart of not only mobility policies but also research and professional and academic practices. This research should cut across the disciplines involved in

transport research, fundamental and applied research, bridge academic, policy, and practice communities in a shared learning process. Research of this type would embrace socio-economic, cultural, environmental, and political dimensions of urban social cohesion (Novy et al., this Special Issue a). This research would also work in a ‘transdisciplinary way’ (Novy et al., this Special Issue b) towards the development of new context-sensitive methods for assessing transport networks and proposed improvements, which would be able to take into account total long term (direct and indirect, sometimes also unpredicted) social, environmental, economic, health, and well being costs and benefits. Finally, this research would work closely with policy makers and users to inform, shape, and evaluate socially cohesive transport policy and practice, which could have positive impacts on territorial and social integration, local and regional market economies, community life, as well as political and social governance of non-economic sections of the society.

Our integrative urban mobility research agenda, which offers only a first step in this direction, is grounded in the analysis of multidimensional relationships between society, land use and transport (Geurs, 2009) to encompass: 1) recognition of the diversity of socio-economic and cultural contexts where particular transport systems are in operation; 2) an examination of activity patterns, making attempts to capture suppressed journeys; 3) a

critical focus on the relationships between transport policies and land use; 4) involvement with a variety of stakeholders, and communication platforms for negotiation of progressive transport solutions; 5) putting into dialogue conflictive ideological discourses on urban transport, and, at least sometimes, encouraging policy-makers to take a political stand towards defending socially cohesive solutions; and 6) an antagonism of the existing status quo in European cities where powerful groups, often unconsciously, exert control over space through influencing transport supply (Vigar, 2002; Baeten, 2000). We discuss each of these in turn below.

4.1. Sensitivity to context

First, urban mobility research and innovative transport policy solutions need to be more sensitive to the social, cultural, and economic conditions of the city. New innovative developments, just as social innovation of any kind, require testing against local cultures, historical trajectories, institutions, ecological conditions, and behavioural patterns (Moulaert and Nussbaumer, 2005; Geels, 2002) and what Raymond Williams (1973) calls the 'structures of feeling' of the city. Thus, differences between impacts of local policies on specific local populations should be carefully examined, as well as cases of successful and unsuccessful policy transfers and the conditions under which

transfer occurred and was modified. Fast mass transit systems, for example, have proved to be effective and cohesive transport solutions in densely urbanised areas, especially where land use and transport planning are well integrated. But in other cities, in the megacities of the Global South in particular, especially where governance capacity is low, more self-organising solutions such as paratransit and the informal sector may be more appropriate (cf. Cervero, 2000; World Bank, 2002; Aworemi, 2008; Neves, 2006; Nascimento, 2007; Maricato, 2000). Analyses of the diverse urban contexts of transport, and comparative studies between Europe and the Global South might be of use also for European cities where, in the face of rising spatial segregation, fast urban rail systems can contribute to social exclusion but can also help cities to grow in inclusive ways. To assess which approach might work demands analysis of the particular socio-cultural patterning of the population. For example, European transport research would benefit from the comparative studies in regard to transport needs and behavioural patterns of ethnic migrants, who constitute a large share of mobility-poor populations in European cities. Researching cultural mobility backgrounds, and ethnic biases leading to underuse or rejection of certain transport modes, among migrant women in particular, could help in developing cohesive transport solutions for

migrants and understanding what might work in a particular place (cf. Harms, 2007, Kasper et al., 2007; Uteng, 2008).

4.2. Researching the individual

This leads us to the second argument – the progressive research should examine everyday life and individual urban mobility patterns. Although past research has shown a considerable interest in individual-oriented approaches to transport planning, this interest was usually limited to ‘objective’ factors (Holz-Rau and Scheiner, 2009). That is, the investigation of the relationships between objective variables such as age, household characteristics, and educational level, on the one hand, and mobility behaviour, on the other. Subjective factors shaping people's behaviours, attitudes, and practices, such as urban lifestyles and socio-cultural action patterns in space which are crucial to the ontology of urban travel but harder to measure, have been overlooked (Götz, 2009; Flamm, 2003). Research challenges in this area would thus include, amongst others: 1) the qualitative analysis of the relationships between transport networks and everyday life patterns relating to work and leisure activities, consumption patterns, family life, friendships, and involvement of individuals in civic life, and connectedness to diverse social groupings at various urban scales; 2) examination of individual perceptions of spaces, distances between locations,

mental mappings of urban space, and conceptualisations of the city as a whole in regard to time budgets and financial constraints; 3) reflection on desirable and imagined mobilities from the perspective of the user; and 4) study of mobility ‘absences’, and, in particular, reasons why certain networks are avoided by vulnerable groups and why levels of mobility remain low among certain groups.

Theoretical concepts in recent studies on everyday urban mobility provide several valuable conceptual frameworks for such research. Particularly useful for analyses of social cohesion might be Kaufmann’s concept of ‘motility’: this is defined as “the capacity of entities (e.g. goods, information or persons) to be mobile in social and geographic space or as the way in which entities access and appropriate the capacity for socio-spatial mobility according to their circumstances” (Kaufmann et al., 2004, p. 750). Motility encompasses three interdependent factors conditioning personal urban mobility – access, competences, and appropriation – giving high importance to socio-subjective conditions of one’s mobility patterns focusing on “the logic of an actor’s actions, in particular the reasons behind the choice of tools and localisations, without being concerned with an action’s maximum utility” (Flamm and Kaufmann, 2006, p. 169). Social exclusion of the mobility poor is then of a multidimensional nature and, therefore, socially inclusive transport solutions

should be aimed not only at improving accessibility, but also at strengthening individual competences and empowering appropriation.

Furthermore, the investigation of socio-subjective aspects of urban mobility is crucial to the analysis of the relationship between transport systems and different dimensions of social cohesion (Novy et al., this Special Issue a), as well as between spatial and social mobility. On the one hand, negotiation of practiced mobilities between mobile subjectivities and structures of the city undermines the totality of socially exclusive or inclusive urban systems. On the other, this negotiation process involves also construction of individual subjects through transport systems and planning imaginaries (Jensen and Richardson, 2007; Richardson and Jensen, 2008; Lévy, 1999) and, when considering motility as a social capital exchangeable to other capitals, reflects the links between spatial and social mobility and represents how the new social inequalities are being produced through transport systems (Kaufmann et al., 2004; Kesserling, 2004; Montulet, 1998). Hence, adding new transport solutions might mean, as in the case of Bangkok Sky Train, not only connecting some places and disconnecting and marginalising others, broadening some and splintering other visual urban landscapes, empowering travel opportunities of the mobility rich and disempowering opportunities of mobility poor, but also

reinforcing existing, and adding new, socially stratifying layers to the city (Richardson and Jensen, 2008).

4.3. Transport and land use

Third, transport research should provide insights for the development of cohesive urban environments through bridging transport policies with land use. There is already a significant body of knowledge on this topic, which recommends mixed land use patterns and high densities in cities to reduce the need for energy-intensive and environmentally-destructive movement, as well as to counteract the spatial mismatch between low-income jobs and poor households. Mixed and compact land use patterns, which lead to reduction of need for trips in all social strata are put forward especially in poor neighbourhoods and include the improvement of the quality of existing facilities (schools, hospitals, etc.), and creation of locally-related job and leisure opportunities (cf. Hart, 1992; Geurs and Van Wee, 2004; Scheller, 2008; Mackett and Titheridge, 2004). There are also more radical approaches at the national and regional levels responding to the growth of megacities and urban sprawl through the concentration of new developments in medium-sized cities (World Bank, 2002). Walkability in particular has positive impacts for social cohesion including social connectedness, social order and safety, involvement

with local community, health and wellbeing (Nasar, 2003; Kim and Kaplan, 2004). There is a need for more research on the cohesion impacts of ‘walking-first’ transport strategies for example.

Within this analysis, the concentration of the vulnerable in certain areas has some benefits from a transport perspective, as it enables more effective delivery of solutions, whereas scattered manifestations of mobility poverty throughout the city make potential solutions less effective (Roth, 1984; Forekenbrock et al., 2001). Such concentrations can lead to the successful implementation of self-help solutions, through car sharing, community mini-buses etc. It should however be noted that while this has been shown to hold in rural areas particularly, the resources may not exist in poorer urban areas for this to happen.

Probably the most challenging research area that arises in-between spatial planning and transport policy in regard to social cohesion concerns the way in which transport infrastructures can function as public spaces. Urban transport hubs, far from being ‘non-places’ (Augé, 1992) can be spaces with a high and unique potential for the establishment of the public realm (Bertolini, 2006). These ‘spaces of flows’ (Castells, 2001) are often the most intensively used spaces in contemporary cities, contain the highest degrees of diversity among users, and the highest level of human co-presence. Although this co-

presence does not often entail high levels of social interaction or even recognition, bus interchanges, railway stations, airports, underground stations, and car parks attract artists, protesters, and function as meeting places and spaces for exchange of ideas and images for those often excluded from increasingly privatized parts of the urban realm (Bertolini, 2006). This public potential of transport hubs, which has been greatly overlooked by researchers from all disciplines and backgrounds, calls for scientific investigation and exploration by policy and practice communities.

4.4. Engagement

Fourth, future transport research should involve a variety of stakeholders: urban policy-makers and city users in particular. This research needs to evolve with continuous feedback from knowledge users to knowledge developers, and thus enable constant refining of new transport solutions, responding to challenges that arise in policy and practice communities and allowing for a flow of 'lay' knowledge into practice communities (Bertolini, 2006). This involves new trans-disciplinary approaches to the collection and analysis of data to include qualitative and quantitative studies of everyday mobility with stakeholders analysing the data and reshaping research directions and an inter-sectoral production of knowledge and dialogue (Novy et al., this

Special Issue b). Foremost, research of this kind requires creation of social platforms operating at various spatial scales which would enable the communication between stakeholders from different backgrounds. On the one hand, these fora should include long-lasting local platforms supported by city authorities, which could allow on an open expression of social interests in or against particular transport solutions. On the other, international social platforms encompassing members who have different stakes in various urban fields would enable the discussion of cross-national policy transfers and interactions between land use, transport, and other policy domains, as well as work towards the development of new methodologies for stakeholder involvement and both formal and informal modes of consultation.

4.5. Summary

Promoting an agenda of social cohesion can be problematic in transport policy and planning. Much urban policy is framed by a neoliberal discourse of economic competitiveness which in the field of transport is strongly attached to discourses of congestion which in turn are backed up by demands for supply-side interventions, themselves bolstered by the disciplines of engineering economics with the ‘travel time saving’ put forward as a major objective of urban transport (Metz, 2008). An ecological discourse has been partly

successful in getting traction in many urban transport discussions but we do note a gap between rhetoric and action here in many cities (e.g. Low and Gleeson, 2003; Vigar, 2002). Social cohesion issues have benefited a little from being in a win-win coalition with social factors in policies such as pedestrianisation schemes which usually lead to a modal shift from motorised to non-motorised mobility while simultaneously encouraging exchange, conviviality and movement for low income groups. But there is a danger here too. Urban splintering implies that marginalised, mobility-poor groups can become concentrated in particular areas. This can help in targeting interventions in space but such efforts can foster further marginalisation through stigmatisation of the vulnerable as permanent clients of welfare state intervention subject to different networks, practices and experiences (Mackett and Titheridge, 2004). For example, public transport improvements might be more effective if they serve diverse interests and attract both the 'mobility privileged' and 'mobility poor', rather than segregate groups into those on premium networks and those left with a residual service. The role of transport researchers lies here in the production of methodologies for investigation of the benefits from social cohesion and providing empirical evidence which might bring together discourses of exclusion and economic competitiveness in a closer relationship with one another. Finally, in cases of inherent conflicts of interests,

transport research should critically enhance awareness of social impacts of transport systems, advocate for socially cohesive solutions and encourage policy makers to put social cohesion at the forefront of debates where it is all too often crowded out by poorly-evidenced calls for economic factors to prevail.

5. Conclusions: towards a progressive urban mobility agenda

The literature addressing urban transport, mobility, and social cohesion is very broad and has a long history. However, the underpinning research base, and the thinking and practices of many who practice it, are still dominated by established approaches and methodologies associated with certain disciplines (of economics and engineering in particular). Social cohesion itself is considered as a vague and hybrid construct without a clear theoretical framework. Whilst interpreted and used in practice by a very diverse set of social, economic, and political actors, affiliated to numerous theoretical traditions in social science, and institutional – mainly EU – backgrounds, this concept has only recently been linked, often implicitly, to debates on urban mobility within transport studies and barely at all in EC research. Socially cohesive transport solutions are very rarely turned into practice through policy-

making that relies mostly on single-modal, technology-led research. We argue that the large sums deployed in research, at EC level in particular, are preventing research from shifting into areas that would prove more fruitful for cohesion questions by clinging to particular methods and ontologies.

Our discussion of a socially cohesive urban mobility agenda was limited to only a few crucial issues for multidimensional relationships between society, land use and transport, thus our challenges and suggestions for comprehensive transport studies are also incomplete. However, we believe that the directions we propose are a step forward in embedding social cohesion into reflections on urban transport systems and urban mobility. The challenges we signal require further deepening and long-lasting qualitative and quantitative investigation, but some of them might already inform and set directions for urban policy.

First, new forms of assessment are needed. Transport policy that considers the broader objectives of public policy is a first step and is a reality in many nations (e.g. Haq, 1997). At a more micro-level, social cost auditing, has long been talked of in transport planning but rarely implemented. And how assessment is done is also critical. The long term generalised social, environmental, and economic benefits and costs of planned transport network improvements should be included in the Cost-Benefit Analysis (CBA), or, in

particular cases, as methodologies for monetising social benefits and costs are always arbitrary, simply put in front in the decision-making process.

Second, best practice examples in transport policies, which are frequently regarded as key drivers of transport innovation and numerous produced across Europe under EU funding, should be tested against social, cultural, economic, and spatial contexts where they are to be implemented: “Are there ‘best practices’ which are convertible like currencies? If not, how and to what extent must one take account of specific circumstances?” (Güller, 1996). Moreover, the deployment of best practices should be followed by studies on the nature of policy interpretations and contextualisation, as well as on expected and unexpected consequences of transfers.

Third, the visions of urban planners and agendas of transport policy-makers should be tested against local mobility patterns including research on the travel experiences of those who use existing networks and those who avoid them in regard to the seven-fold categorisation of the ways in which social exclusion arises pointed out by Church et al (2000). This should incorporate the more recent work on motility, space and social cohesion expressed by Kauffmann (2004), Bertolini (2006) and Richardson and Jensen (2008) among others, which might in turn bring broad cohesion issues arising from urban travel in to research and policy-making.

Last but not least, social platforms for practitioner and stakeholder involvement should be supported and created as part of implementing a debate on new socially cohesive urban transport solutions, and used for discussing and promoting behavioural change and more socially just mobility lifestyles.

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