Sustainable mobility
Challenges, opportunities and conflicts – A social science perspective

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Sustainable mobility is a term that summarises what is at stake in contemporary attempts to redress the balance of costs and benefits in the transport sector. It marks a shift away from the traditional transport planning approach, which conceptualised transport as a derived demand and as a support infrastructure for economic growth, towards a policy approach that is informed by evidence and risk assessment and which recognises the pitfalls of unconstrained growth.

As a vision, sustainable mobility has been quite influential in effecting a change of thinking and indeed often also a change of heart among policy-makers and key stakeholders. Goals like environmental protection and ideas like participatory democracy, which were foreign to the minds of transport planners and experts not so long ago, have been established as important milestones on the transport policy agenda. Even those that dismiss the sustainable development discourse as having no relevance for transport and mobility are forced to accept that it today forms an integral part of the rules of the game. Whatever other successes or failures we attribute to sustainable mobility, this is most likely its biggest achievement to-date.

In terms of objective measures of performance, the sustainable mobility policy agenda has much less to show. With transport demand continuing to grow at roughly the same rate as the economy as whole – in the absence, in other words, of any "decoupling" of transport growth from economic growth –, the fact that the dominant transport modes, namely road and air, also contribute most to environmental pollution does not make sustainable mobility goals any more tangible. The reluctance of public administrations to invest into new environmentally-friendly transport infrastructure, in view of the latter's high costs and limited state budgets, has tended to aggravate the situation and has definitely reduced the policy options. The strength of the road and air industry lobbies vis-à-vis much weaker rail and waterborne interest representations has contributed further to the difficult progress path.

One of the main reasons for the relative strength of the air and road lobbies is the their success in terms of adjusting to the market and competition mentality that has dominated the transport sector since the middle of the 1980s. The liberalisation of the transport market has definitely been the most remarkable development of transport policy over the last several years. Besides introducing the private sector into the running of transport services, deregulation has sought to use competition as a means for encouraging management reforms, efficiency gains and technological innovations. This has been successful in part but not fully. Quite significantly, the deregulation of transport markets has tended more to be supportive of oligopolies than to lead to real competition. Undoubtedly this has to do with the nature of the transport sector. Transport is an investment-intensive sector and one that encompasses services of public interest.

Privatisation is thus either not possible in the traditional sense of the word or not desirable as it could lead to major losses of service quality or serious compromises with regard to the internalisation of external costs. That transport economics is or should be different from classical economics is generally recognised, yet policy is not always in sync with professional advice.

The realisation of sustainable mobility is heavily dependent on the production of expertise on sustainable mobility. Expertise on sustainable mobility differs from traditional transport expertise, which has, not surprisingly, been based on engineering and planning. Contemporary transport expertise is much more informed by economics than by either engineering or planning. Expertise on sustainable mobility is further differentiated by being much more inter-disciplinary – environmental assessment is as central to sustainable mobility expertise as knowledge of spatial / regional development and decision-making processes.

The distinct character of sustainable mobility expertise as compared to earlier forms of transport expertise is shown by the selection of articles in this issue of the *International Social Science Journal.* It is indicative that, even though the majority of the authors do not have a social science background, they are dealing with traditional social science themes when addressing issues or questions relevant for their day-to-day work in transport policy advice or assessment.

One key concern that emerges in practically all contributions is the question of the management, coordination and analysis of complex decision-making processes. Contemporary transport policy processes are characterised by more openness and participation. New stakeholders include sub-national entities (local or city authorities), private and non-governmental actors (transport operators, civil society organisations) as well as supra-national decision-making fora (like the EU, WTO and so on). Even a sector like air transport, characterised by comparatively closed networks, is being forced to extend its scope and allow both new players and issues within its boundaries, which thus become more flexible (Carsten Gertz). The same is true of the urban sector – the focus of two European-level analyses, by Egmond et al. and Oliver Mietzsch respectively – where we can observe the strengthening of both city public administrations and private operators. A regulatory framework that supports competition and at the same time guarantees standards for the provision of public services would appear more successful in terms of both decision input and policy output than one which emphasises deregulation alone. Decision-making in a framework characterised by regulated deregulation must, however, be learned and caution is called for in order to avoid re-inventing "closed shop" networks with little opportunity for scrutiny and accountability.

The close link between sustainability, on the one hand, and democracy, on the other – and, in turn, justice or equity – is also raised forcefully by Patrice Salini in his contribution, which reflects on European transport policy, as well as by David Banister in his mid-term review of the development of congestion charging in London. Contemporary transport problems call for a system dynamics approach. In turn, this cannot be realised without widening participation opportunities in the decision-making

process. Joseph Szyliowicz, discussing the need to promote intermodality, calls this a new paradigm. Intermodal transport calls for a re-focus of transport analysis on the transport chain from origin to destination, and the implementation of strategies that render this transport chain more fluid and frictionless through logistical services that facilitate the change from one mode to another.

As we know already from the early days of environmental management consulting, a key element of environmental sustainability is the better organisation of distinct, albeit inter-related processes. It is for this reason that intermodal transport is considered promising both with regard to efficiency gains with reference to the whole transport system and with regard to the reduction of external costs like negative environmental effects. Thinking intermodally necessitates, however, thinking in a networked manner, an approach which is still rather foreign to the sectorally organised transport field.

The focus on interrelationships is also what is mainly lacking from sustainable mobility indicators developed by various international organisations. Henrik Gudmunson's contribution shows that what is today lacking is not data – of that there is more than enough, even if not always comparable – but rather useful analytical interpretation frameworks. The policy-relevant question is not what data there is but rather what does the existing information say about the performance of the sustainable development paradigm at the aggregate level and, more importantly, about the performance of specific policies or the impact of specific policy measures.

The need to reconsider transport decision-making processes both in terms of planning and in terms of analytical inquiry has yet another source, namely the calls for cross-sectoral integration between transport and other policy sectors. Five contributions deal with this theme. In their contribution on the historically path-dependent close link between urban planning and the design of local transport networks, Ralph Henson and Steven Essex show that transport planning has been influenced by urban planning and vice versa and that contemporary transport planning must take into account the challenges faced by modern cities and to try to correct rather than repeat mistakes of the past. The contribution of Marianne van der Schuren and Galaria Sirin on the South African post-apartheid city exemplifies how difficult it is to reverse mistakes of the past and achieve sustainability in big cities of the present.

The way in which location and accessibility factors influence residence or housing choices tends to reproduce patterns of inclusion and exclusion within a city. In this connection, the mobility needs of the elderly deserve particular attention given the ageing trends in advanced post-industrial societies. The contribution of transport to social exclusion (or social inclusion) deserves, however, a debate of wider scope given the increasing gap between socio-economic groups within specific societies, on the one hand, and between countries or continents, on the other. With regard to the latter, both the mobility of persons and the mobility of goods (or freight transport) are of relevance. There is no doubt that transport facilitates or indeed gives rise to some of the most absurd phenomena of the globalised market from the sustainability perspective. This is, for instance, the case of the transport of goods from one country or continent to another for

the purpose of processing prior to re-importation in the country of origin for marketing and selling. That this is possible can be explained by the gap in labour costs between countries in conjunction with low transport costs. Such mobility patterns are problematic with regard to creating additional volumes of transport demand but also in terms of reproducing geographical and social patterns of inequality and dependence.

Economic considerations rather than living conditions often also dominate land-use policy with which transport policy is closely linked. The contributions of Dominic Stead and of Vincent Kaufmann and Christophe Jemelin call for a closer coordination between the two policy sectors but also for a re-thinking of these with reference to socio-economic development. Again, this is necessary not only in the European context or at the urban level, but also globally. Especially when thinking from within the sustainable mobility paradigm, it is important to be able to move from the global to the local and back and to effect the linkages between the two on a continuous basis.

This issue was prepared on the basis of an open call. The response to this call deserves comment from two perspectives.

The first is the disciplinary background of the contributors, which I already hinted at earlier in this introduction. Even though this is a social science journal, and the call was also distributed among social scientists, the latter are the minority among the contributors. I have already commented on what this suggests about the sustainable mobility discourse, namely that although this is not a discourse dominated by social scientists, it represents an interdisciplinary programme which is well informed by social science themes. That only a minority of social scientists by professional qualification is working on this topic is regrettable and shows that social scientists are often far removed from policy analysis and applied policy-relevant research of. Even though policy-relevance is not – nor should it necessarily be – the central focus of social scientific inquiry, it should also not be the case that the social science research community is so abstracted from such application-oriented areas.

The second perspective from which the response to the call can be commented upon concerns the themes *not* addressed. To reiterate, well covered were the themes of decision-making and cross-sectoral integration as well as social exclusion / equity, albeit to a lesser extent. On the other hand, there was only one contribution dealing with the symbolic perception and representation of transport phenomena (Wolfgang Schade on noise) and one dealing with the prospects of technological innovation in the transport sector – not insignificantly from the view point of the diffusion rather than the creation of new technologies (Nicodemus Herb Castillo and David Pitfield on the adoption of natural gas vehicles by bus operators).

The under-representation of contributions on these themes is indicative of the weak links of the sustainable mobility discourse to (social) psychology, on the one hand, and technology development and assessment, on the other. Even though these two fields could in many respects not be more different, what they have in common is telling. Both these fields have something to say about the potential “user perspective” on the

sustainable mobility discourse. Indeed, technology assessment, even though well anchored on the transport policy agenda, is largely uninformed by what people think of transport or how they perceive transport policy or technological knowledge and innovation. These are research areas that deserve exploration with the objective of better linking them with the sustainable mobility discourse, possibly with a view to the latter's advancement as a political programme.

A final comment concerns the geographical distribution of the contributions to this issue. Nothwithstanding the quality of the contributions included herein, it is noted with regret that the majority come from Europe and/or use European examples to illustrate their theses or make their arguments. I nevertheless hope that the themes raised by this issue are of interest for a wider readership, and not solely for a European audience, and take the opportunity to invite transport specialists from other regions, as well as social scientists for whom transport issues shed light on general problems of political, social and economic regulation, to respond to and to comment on the discussion initiated here. The Editor of the *International Social Science Journal* and I shall be pleased to follow up the debate in future issues.