

Mobile Cities – Reinventing Urban Mobility*

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If we review global city and transport development, we are confronted with a broad spectrum of very different paths of development. For a first systematic approach to this confusing panoply of development types we can fall back on the typology of the United Nations, which assesses the countries of the Earth primarily according to their economic development, and groups them into regions (cf. UN-Habitat 2004). If we follow this typology we find ourselves looking on the one hand at city and transport development in the developed industrial countries of Europe, in the USA and in Japan, and on the other hand at the developing countries in Latin America, Asia and Africa. But in view of the multifarious nature of city and transport development in the various regions of the world, it soon becomes apparent that a typology based solely on economic criteria can hardly do justice to the current dynamic of development. The urban centres of industrial regions such as Europe and the USA were once universally considered to be the driving forces behind economic growth; today they are characterised by a multitude of nuclei of growth and shrinkage. In addition, different stages of economic, social, cultural and political development coexist in the various world regions and countries, and even in individual settlement agglomerations. Whereas the link between political and economic significance in a metropolis was once strong, and promoted social and cultural development, today a city like Berlin demonstrates the absence of synchrony in the new type of global development. In Berlin, the political power which the city enjoys by virtue of its status as capital is combined with a somewhat more modest economic performance and accompanied by profound social disparities and growing cultural significance. The example of Berlin can of course only demonstrate one of many conceivable combinations of the four dimensions of development –

* This essay is based on the results of the study 'Mobile Cities. Dynamiken weltweiter Stadt- und Verkehrsentwicklung' by Oliver Schöller-Schwedes and Stephan Rammler (2008).

economy, politics, social matters and culture – but the important thing is that almost all combinations are now conceivable.

This is especially true of the megacities that are rapidly developing all over the world. In China for instance the absence of synchrony between the four aspects of development mentioned above is even more markedly pronounced, which is what makes it so difficult to form a coherent picture of the country. It is also the reason why estimates of China's chances of development vary so greatly even among experts (cf. Friedman 2005). In China there are zones of economic growth in which the culture of global capitalism can function in its purest form and social rights are more or less unheard of, because these are enclaves almost untouched by the effects of political influence. These islands of economic prosperity are surrounded by a sea of the country's rural population which is economically backward and culturally still trapped in the old feudal system, and has hardly any chances of social development. But it is from China of all places that the impetus comes for a new political development whose aim is social participation. On the one hand, the vigorous economic development of China's megacities is taking place under the political control of central government, where a new middle class geared towards western values is engaged in a dynamic cultural life. On the other hand, in close proximity, millions of itinerant workers are eking out a wretched existence (cf. Davis 2006). Sometimes the economic development progresses so quickly that there is not enough time to adjust the prevailing political circumstances. This results in social upheaval, and leaves the people with their traditional cultural practices lagging behind. On the other hand, political innovation has its roots in cultural backwardness, economic poverty and social misery. Or else a social group asserts itself, as in the case of the Chinese peasants. As the driving force behind a massive process of transformation affecting the whole of Chinese society, this group of people demonstrates just how adaptable humans can be (cf. Guido/Chutao 2006). Such synchrony of the asynchronous is not just to be found in China; it is a general phenomenon of all global city and transport development culminating in

megacities. The urbanisation without economic growth which can be observed in the countries of Africa demonstrates this particularly clearly, while at the same time refuting the traditional western concept of city development as a manifestation of the progressive nature of civilisation (cf. Radoki 1997; 2006). A typology of global city and transport development can therefore no longer be attributed to a handful of typical patterns of development – if, that is, it was ever possible. In view of the wide variety of different types of development outlined above, we should instead aim to provide appropriate on-the-spot descriptions of concrete and historically specific forms of development.

Nevertheless, alongside the specific patterns of development, an international comparison of city and transport development also reveals structural trends which encompass all the particularities in question to an equal extent. In all examined world regions, the most striking of these is certainly *urbanisation*. Independent of the specific economic state of development, the political constitution in question, the arrangement of social conditions or the particular cultural character of the region, rapid urbanisation is now ubiquitous. Fundamentally inseparable from this urbanisation is the equally rapid *mobilisation* of all these otherwise so diverse societies. Once people have set off to seek their luck in the urban centres, they remain on the move. In many respects, this social change resembles the historical transition from the rigid European system of estates to the stratified social structures of modern societies. This brings us to a third all-encompassing developmental trend in the modernisation of societies, namely *social differentiation*. This differentiation manifests itself in a sprawling settlement structure that develops a variety of functional systems; the result is a constant increase in the volume of traffic and an increasingly complex transport system. We need not then deny the above social particularities of the individual countries and regions in order to recognise aspects of an all-encompassing process of development in the sense of a process of ‘catching up’ with the modern age (Featherstone 1995; Appadurai 1996). Two lines of development are crucial to global city and transport

development in this all-encompassing sense; they are everywhere apparent and deserve particular emphasis. If they are not particularly surprising, they are nevertheless fraught with consequences. The first is the ever-growing global dominance of private transport for individuals, especially that of the private car and its precursor the motorcycle; the second is the reorganisation of public transport according to criteria of efficiency largely geared towards the private sector (cf. too Vasconcello 2001: 297). The two paths of development converge to precipitate non-sustainable city and transport development. The repeatedly expressed hope that outside the developed countries it might perhaps be possible to at least set off on a path more accommodating towards sustainable city and transport development has not yet been fulfilled (cf. Kennworthy/Laube 2001). Instead, alarming parallels can be seen, above all in the negative social and ecological effects. In view of the sheer extent of global city and transport development, even the western industrial countries are increasingly beginning to regard the topic as a global challenge (cf. UNFPA 2007). To begin with, going by our current western standards, it would be impossible to produce the resources necessary for the steadily advancing urbanisation and mobilisation of the Earth. Added to this are the gas emissions that accompany the consumption of fossil energy sources. In both cases, China and India alone make clear the extent of the consequences we can expect: 'If the two countries were to consume as much oil per person as Japan does today, their requirements alone would exceed current global oil consumption. And if their share per capita of the current biosphere corresponded to that of today's Europe, we would need an entire planet Earth to satisfy these two countries.' (Worldwatch Institute 2006: 50f.). The global climatological consequences of this development have been set out in the most recent report of the Intergovernmental Panel on Climate Change (cf. IPCC 2007). According to this report, it is no longer possible to avert a rise of between 1.5 and 2 degrees Celsius in the Earth's temperature, due to the inertia of the climate system. This increase in temperature alone will have far-reaching consequences such as storms and floods that will require significant efforts at adjustment, especially in those cities situated on water, if the 360 million odd city

dwellers at risk are to be protected. As the possibilities of reacting adequately to 'natural disasters' such as these are distributed very unequally across the globe, there are even today examples of serious social upheaval in the developing countries. This leads to violent conflicts over meagre resources and extensive migratory movement. According to the most recent UN report on human development, if we do not succeed in reducing global greenhouse gas emissions, the resulting negative effects that are already beginning to make themselves felt will assume proportions worldwide that we will scarcely be able to control politically (cf. UNDP 2007).

Climate change dominates current discussions on sustainable city and transport development. But because of the urgency of this particular problem, we are at risk of losing our sense of the importance of a far more complex and possibly more dangerous development. In the current discussion on mobility, the limited nature and the shortage of fossil fuel resources should in fact receive just as much attention as climate change. Similarly, the debate on future energy supplies of whatever nature should dominate all social and political discussions. In particular, the subject deserves our full attention because in the short and middle term it demonstrates a potential for crisis that is both politically and socially incomparably more disastrous than climate change. Although the two are closely linked, the question of energy supplies is *the* crucial global question of the early 21st century. To approach this issue is therefore to tackle the real key to many other problems and to remain capable of functioning as a society – above all as far as climate is concerned. Why is this? The increasingly intense competition for distribution within a global society is almost entirely dependent on oil consumption – and not just in order to maintain its crucial mechanism of coordination, the transport system. This competition conceals the danger of geopolitical and economic upheaval of such vast and drastic proportions that it could lead to the destabilisation of world peace and social security at all levels. These dangers are grossly underestimated at present both in terms of the already significant likelihood that they occur and in terms of the force of their

effects (cf. Altvater 2005). If they did occur, we would ultimately fail in our attempt to protect the climate, and worse still we would fail to combat and overcome the already ineluctable results of climate change. Approximately 58% of global petroleum consumption today (and an estimated 64% in 2020) is the responsibility of the transport sector; in some regions it is even more. 98% of the European transport sector is based on petroleum consumption. And so, although in comparison to other emitters of CO₂ such as domestic energy, industry or agriculture, mobility actually plays a fairly minor role in the threat to the climate, it could play a crucial role in combating the dangers of oil dependency. Just to drive it home – a significant proportion of the most important conflicts and wars of the present day are to a certain extent being waged to keep the transport sector alive, to keep alive, that is, the driving force behind our – not just western – societies. Transport is the heart and bloodstream of society; it is the overarching system that keeps everything connected in the social organism in its permanent process of differentiation; it is not just any old organ that we can easily do without. It is because fossil mobility plays such a crucial role strategically that we are prepared to take such great risks and meet such immense costs; it is the reason too why fossil mobility acts as a kind of anchorage for political energy conversion strategies heading for a culture of post-fossil mobility. In his 1963 essay, 'Operating Manual for Spaceship Earth', Richard Buckminster Fuller has come up with a very apt simile to illustrate the problem. He sees fossil energy as the 'storage battery' that God has given humanity to allow them to get the main engine of their spaceship running at a high level of civilisation and technology. He urges us to finally start the engine, so as to be able to keep travelling in the long term. Fuller also refers to the only possible long-term alternative to the present situation, namely the complete transposition of our primary energy production onto a regenerative basis – ultimately solar energy. The nations which are 'catching up' with modernisation are beginning their social and economic development at a time when the storage battery is already almost flat. This in itself casts doubt on the form the development is taking – even if we set aside the

environmental consequences considered above. For what little charge remains in the battery is becoming increasingly expensive.

It seems then that in spite of regional differences, global city and transport development is pursuing a general course of civilisation with highly ambivalent consequences. The sociologist Norbert Elias has characterised this dynamic of development as a 'maelstrom' which affects all those involved to an equal extent and offers no real way out (cf. Elias 2003: 171ff.). The story by Edgar Allan Poe (also called 'The Maelstrom') served Elias as a kind of parable. In Poe's story, some fishermen out at sea are caught in a powerful whirlpool in the wake of a storm. Those of them who are paralysed with horror in the face of the monstrous forces of nature and cling to the boards of the deck are in the end pulled down with the boat into the depths and perish, but one of the fishermen begins to study the effects of the maelstrom's power. He notices that objects of different shapes and sizes are pulled down at different speeds. When he observes that round, hollow forms are pulled particularly slowly into the abyss, the fisherman ties himself without further ado to a barrel and jumps out of the boat. While he is watching the boat slowly disappear into the depths of the whirlpool, the storm abates and the maelstrom disperses, setting the fisherman free. The maelstrom served Elias as a metaphor for the human process of civilisation: no one can really escape, but humankind can survive if they understand how it functions and develop appropriate strategies to deal with it. In terms of global challenges, the human race today finds itself in a comparable situation. No one seems able to escape the maelstrom of a global dynamic of urbanisation and mobilisation powered by fossil fuels and rooted in a process of social differentiation based on the division of labour. It remains to be asked how humanity can survive this threat. Investigations on global city and transport development have not yet come up with any models that would be capable of solving the problems we are up against (Schöller-Schwedes/Rammler 2008). This includes the megacities which are prized as laboratories for the creation of entirely new dimensions of city growth. It seems that the 'conventional' concepts of city and transport

development are not equal to future challenges. Campaigns to promote individual, relatively ecological forms of transport such as the high-speed bus system, trams and underground trains or even cycling have time and again led only to short-term relief. Even the decade-long success of the city and transport development in the Brazilian city of Curitiba which is still cited as a success story, is beginning to reach the limits of its capacity (cf. Zanini 2005). Considered realistically, even the integrated city and transport development which is hailed as common sense throughout the world, seems in the end to be an inadequate strategy for rendering sustainable the expected dynamic of development. Even if we assume the optimistic scenario that all developing countries succeed in attaining the same degree of integration in city and transport planning as the developed industrial nations, we still have to reckon with the fact that this too would at best bring short-term relief, before the extent of predicted city and transport growth once again destroyed the acquired gains in efficiency (cf. Worldwatch Institute 2007). If the maelstrom of city and transport development is to be made sustainable – and that means supportable for humans and nature – we obviously require new instruments, or rather a completely new way of thinking. Nevertheless current strategies continue to back traditional methods such as were developed at the end of the 19th and beginning of the 20th century in response to the pressing nature of the problem of urbanisation which was then at its height in the western metropolis. At that time, far-reaching social reforms led to a reconciliation of interests between those who had suffered particularly badly under the prevailing conditions and those who had more than profited from them. If we consider global city and transport development we can see that the current methods of urbanisation are once again accompanied by serious social upheaval, so that city and transport policies which aim for sustainable development regularly fail. In this context we should recall the warning of the city researcher Leonardo Benevolo: ‘the preservation of the city (...) requires the re-establishment of equilibrium between interests in the decision-making process so that the physical setting and the social body can also achieve a balanced coexistence’ (Benevolo 1993, 219f.). In view of the completely new dimension to

the current problems, the original political task of creating socially balanced conditions is today too the crucial prerequisite to drawing up suitable and innovative methods of tackling city and transport development equal to the challenges involved. But whereas in the past the individual European states organised their city and transport development relatively independently of one another, we now find ourselves confronted with a global task. Thus the fixation on megacities and the question as to whether or not they are equal to solving the problems seems to me to fall short of the mark. The megacities are part of an international configuration of social power relations that is characterised by serious inequality. Whether or not the megacities reach a level of political competence in trade and problem-solving high enough to reinvent urban mobility will depend on how far they succeed in shifting the pronounced international imbalance of power to their advantage.

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