**Marie Thynell**
**Department of Peace and Development Research**
**Goteborg University**
**Box 700**
**SE - 405 30 Goteborg**
**Sweden**
**e-mail: m.thynell@padrigu.gu.se**

# The West and the rest. Globalization of automobility.

*"Which politician would dare to take the cars, the new found toy, away from the Polish people?"*

The question was put by the Minister of Transport, Mr Liberacki in Poland in a debate on ecofriendly car technology and possible price rices. Of course, no one could advise the Minister how to deal with this neither in Poland, nor in any other country being exposed to dramatic increases in the number of motorized vehicles.

The background of the question is the outspoken desire for more cars in Poland. The rapid increase in the number of cars entails a variety of problems confronting the democratic authorities with a new kind of difficulties since they have not dealt with issues of mass-mobility until now. By posing this question the Minister put forth the complex relation between states, markets, consumers and development interacting in todays' transformation and how increase in physical mobility interplay with these relations in Poland.

Generally speaking, on the one hand the main trend has implicated that authorities have supported mass-motorization and the various actors on the expanding market of motorized transport. On the other hand, the authorities in todays' societies will have to elaborate strategies coping with the negative consequences of increased car use as will be described below on page 4.

In order to understand the character of this *problematique* follows: how has the dilemma of finding a balance between the negative and the positive sides of automobility been created?

The automotive industry was the first globalized industry. Automobility was integrated into economic and social life in the U.S. and Europe also called the Western nation states. The adoption of automobility as a societal phenomenon was followed by changes in patterns of consumption and the emergence of a lifestyle, suitable to the properties of cars. Cars have contributed considerably to the intensified globalization of the modern Western lifestyle and todays' global economy. The integration of cars and car culture is a fact in todays' world community. The expansion of physical mobility is seen as a global mega-trend and is forecasted to increase substantially in most countries.

Automobility and the overall motorization of land transport became an important aspect of progress and of the design of contemporary society long ago. Still, there are no attractive examples of restrictions of physical mobility, supply of motorization, transportation or automobilization. The production and use of motorized vehicles was attributed the role of being a 'motor' in development in times of economic expansion. The progress of motorization in NOECD-countries (*i.e.* non-OECD countries) is a reflection of previous development in the earlier industrialised countries.

The private car is highly attractive as a symbol for social progress. This is seen *e.g.* in the emerging middle class in areas where traditional socio-economic systems are being modernized and relativized by macro-regional or / and global change in political and economic structures. On the political level the nation-state system is being relativized and weakened by regional entities, through the evolution of political and economic relations linked together by such phenomena as the evolution of a new techno-economic paradigm and automobility as a carrier of globalization.

The ongoing globalization of automobility is adding yet another burden on local as well as global environmental systems. In todays' debate on means and aims of development, economic and environmental sustainability are crucial issues. These two kinds of sustainability are difficult to combine and the modern lifestyle depending on extensive use of cars will hence be subjected to critical examination.

**Facts and Concepts**

In 1946 there were 46 million cars in the world, 75 per cent of those were registered in the U.S. In 1995 there were 495 million cars registered. According to a prognosis made by the OECD there will be 561 million in the year 2000, and 707 million cars by 2010. Accordingly less than 10 per cent of the global population are car owners.

In developing countries the average car density was roughly 5-10 cars as per 1000 inhabitants in the 1980's and the average for China was estimated to 1-2 cars / 1000. The number of cars in developing countries are today rapidly increasing and globally car density has increased from 30 to 70 cars / 1000 persons from 1970 to 1990.[1] This data can be compared with statistics on the U.S. were the corresponding number in 1995 was 769 cars / 1000 indicating the hugh difference between the various regions (WEC 1995:10).

Data concerning consumption of transport energy shows that the U.S. *i.e.* 5 per cent of the global population consumes 36 per cent of all transport energy, while the NOECD countries hosting 81 per cent of the population, consumes 20 per cent of all transport energy.[2] The global unequalness of consumption in transport highlights the huge difference in access to physical mobility between the various regions of the world and as always average numbers are masking the very large variations between rich and poor areas. Accordingly local conditions need to be explored in order to survey the actual access to motorised transport in different social and geographical environments.

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[1] In general, cars are driven more frequently in developing countries than in Europe, *i.e.* the amount of trips/car is higher in the large cities in developing countries than is the case in *e.g.* cities in Europe.

[2] According to estimated population 1995 as presented by the UNDP, http://www.undp.org/hdro/pop.htm and

As soon as people can afford it they tend to prefer to go by car wherever they live. Available data indicate that a continous increase in physical mobility and automobility is taking place in developing countries. At the same time most politicians recognise officially that it is not longer feasible for every family in the world to have their own car since billions of cars would pose a serious threat to the global environment.

The problems associated with motorized transport seem to be very difficult to solve in the long-term perspective. The most salient features in need of consideration are:

**a)** the congestion and other problems in densely populated areas related to the capacity of local road infrastructures,
**b)** a tremendous number of killed and injured people. ”In its first century the automobile has claimed 30 million peoples life”.[3]
**c)** the local, regional and global constraint on the ecological systems are far above sustainable levels,
**d)** the fuel supply required by the rapidly increasing fleet of motor vehicles is still an issue in urgent need of a solution.

Transportation and automobility are societal phenomena to a large extent designed by technical and economic expertise. Policy instruments and concrete measures applied so far have proven to be inadequate and insufficient. By this I am referring to transport policies and local traffic campaigns in general. Also technical development appears to be insufficient and inadequate means to control traffic growth. Development in the sector of transportation is hence characterised by market failures as well as by government failures.

[3] In 1998 the International Federation of Red Cross presented data indicating that a major increase in the number of fatal accidents is expected in developing countries due to expanded use of motor vehicles. ”Traffic accidents already costs the South almost as much as all the aid they receive” around USD 53 billion a year according to Dr. Heiberg 1998. Also in European countries, *e.g.* Poland, car accidents are a main cause of death for

*Concepts*

The concept of motorization refers to the societal integration of motorized vehicles, including private cars and commercial vehicles.

In order to illuminate the special and modern character of automobility the concept is applied to illustrate how the private car is integrated into society and appropriated by individuals. The private car is an appreciated symbol for social progress and has become an *icon* for modernity, and the individuality and societal success. Automobility is a large technological infrasystem consisting of drivers, vehicles, roads, systems for fuel provison, service and so forth. At the same time it is also a technical infrasystem for transporting goods and people.

Summarizing this it could be stated that the automobilization of national and household economies together with the outcome of the values inherent in the Fordist techno-economic paradigm have tended to enlarge markets and sustain economic growth (Thynell 1998, 1999).

**The International Political Economy of Automobility**

The emergence of the International Political Economy of Automobilization and Motorization in the second half of the twentieth century was the result of a growing structural dependency on private as well as commercial motorized land transport and a growing awareness about environmental degradation caused by the same motorization. Todays' discussion about the role of automobility originates mainly from two experiences:

- On the one hand the growing conflicts related to the degradation of natural resources. Salient events are *e.g.* the UN conference on the Human Environment held in Stockholm in 1972 and the oil crises of the 70's. Consequently bodies such as Ministries of Environment and NGO's were established. The more recent UNCED declaration and the Kyoto protocol have

further stressed the importance of dealing with environmental degradation due to pollution. The focus on governance of environmental issues through these organizations have strenghtened the administrative capacity to deal with this problems.

- The other experience has to do with progress of modernization and its in-built structural dependency on motorized transport especially of car use, to supply the demand of physical mobility in developed and developing countries. The lack and / or scarcity of access to physical mobility most obvious in developing contexts, is undermining the possibilities of improving life quality of too many people. The lack and / or scarcity of public transport represents constraint to the possibilities of survival for extremely poor citizens, primarily in developing contexts. A fact emphasized by the World Bank in their programme for the twenty-first century *e.g.*

The production and the use of cars are vital parts of the large technological system called transport. They are also necessary tools for expansion of economic markets. Being the first globalized industry, the autoindustrial complex has been seen as having a strong capacity of pushing the state closer to the world market. Accordingly the development of automobility has been closely linked to the outcome of the relation between the state and the market. The dynamics recognised within automotive complex in the OECD-region have been intertwined with the prevailing perspective on development. In the OECD-region the perspecitve have mainly been the very mainstream development.

Most countries are sensitive to changes in development strategy concerning the design of motorization, automobilization and issues of transportation. The often dramatic increase in transport in developing parts of the world is reflecting the evolution of westernised societies in the twentieth century. During the first part of this century practical aspects related to technical and economic development were in focus and therefore treated by mainstream technicians and economists. These experts have provided the system of transportation and automobility with the design we have today.

The acceptancy of the buzzword of 'Sustainable Development' opened the eyes on the unsustainable character of much of what has been called mainstream development. The various UN conferences and political bodies worldwide have to carry out the work making development more sustainable and to bring the protocol of international agreements into reality.

**Research approach to motorization and social change**

The increase of automobility has resulted in todays' dependency on privately-owned cars for transport of public and goods. Commercial vehicles and private cars are often produced by the same companies *i.e.* they are produced by the same economic actor however, the social and economic functions of private vehicles and commercial vehicles differs. The various kinds of vehicles have different functions regarding patterns of mobility and economic activities related to consumption. The appropriation of cars on individual/family levels and the role of cars in household economy is separate from the use of commercial and heavy vehicles when it comes to the usage of various kinds of vehicles.

The two dominating methods of dealing with societal issues in Social science have been structural approach and actor-oriented approach. In order to deal with the crisis of modernity related to automobility approaches used by social constructivists could be combined with already established structural and actor-oriented methods.

Increased reflectiveness on how dominating expert systems interact in the shaping of social practises involved in automobility contributes with a deeper understanding of the socio-economic phenomenon of automobility. The kind of approach I am referring to can briefly be described as constructivist focusing on:

> ***"how inter-subjective practices between actors result in identities and interests being formed in the processes of interaction rather than being formed prior to interaction" (Wendt 1992:393sq).***

It could be argued that concepts and perspectives from social constructivism only slightly improves the capacity inherent in the actor-oriented procedure. However, I consider the contribution of social constructivisim apt to deal with the critical issues involved in the crisis of modernity and current motorization. The reason for this is as follows: access to mobility is gradually moving away from the domain of experts. The actor-oriented approach could be applied when studying the self-interest of the huge economic actors and the constructivist approach while focusing on civil society. The debunking of the expert domination of transport, motorization and automobilization *i.e.* the technological aspects of community life, is gradually taking place and civil society is getting involved decision-making processes surrounding infrastructural projects.

The integration of a constructivist perspective makes it possible to elaborate the actor-oriented approach as to improve the sensibility and understanding of how ideas, knowledge and visions about our future society interplay with economic actors *i.e.* their ways of dealing with the economic and political structures in this particular field.

How is the reality constructed and which are the visions ready to be realized? The various mergers between automakers on different continents illustrates this. Various collaboration projects have also been created during the last years increasing the possibilities of making huge investments in new production methods and new models. These huge investments are partly aiming at finding solutions to some of the problems described on page 4. The visions of the car producers are met by urban policies reflecting the needs of todays' modern and highly motorized urban areas. The trends in economic and technically developed parts of the world are materialized in new and individually designed social practices. Inherent here, are future lifestyles promoted by the development of a new generation of cars. The implementation of the visions produced in the area of transport are carried out in the interplay of states and markets and depending on the desirable visions of a common future.

**The dilemma of late modernity and automobility - final remarks**

The concept of modern Westernised development has its proper expression in the field of transport. Huge capital investment in infrastructure; bridges, tunnels, streets and highways have been guided by, what I refer to as the modernization fury. The machine-like metaphores have been used to describe the desired outcome and the ensuing rapid changes.

A contribution to the success story of automobility in the twentieth century was the support of the European nation states. Automobility and the Fordist techno-economic paradigm were rapidly accepted and coopted by technical and economic experts and integrated into the modern nation state project. The Westernised states have lend considerable structural aid to the introduction and maintenance of the auto-industrial complex and to the individual use of cars *e.g.* by the construction of the infrastructure and research.

Mainstream development has emphasized the need to industrialize and to enlarge markets by means of consumption, primarily nationally and later on internationally. The state in developing countries have often achieved and kept control of infrastructure involved in transportation. This development was never thoroughly evaluated in terms of economic and social consequences.

In this strategy for development, access to individual mobility has been attributed to cars and other kinds of motorized vehicles. The rapid improvements of the practical and material aspects of human life during this century will most likely, be followed by ways of dealing with the appalling inconveniences and the dangers provocated by the same development. One way of dealing with this is to focus on the interaction of ideas, knowledge and the ways by which identity is constructed by this kind of processes.

The economic needs of todays' developed and developing societies seem to be in conflict with actions necessary to come to grips with global environmental deterioration. So far, the overall economic growth has been given priority in the

framework where production, ownership and car use have expanded. It could be argued that the research agenda in the field of transport and automobility - to a considerable extent - was set by mainstream development and dominant actors in the world economy with the support of technical expertise.

As a result of this the research in the field of transport has so far, focused on how to increase the possibilities of transport as to improve economic growth and technical development. The existing knowledge is a reflection of this outspoken aim. It is time to put and end to sayings such as: Industrialize or whither away! and its equivalent in transport: Motorize or whither away! At the same time more than 90 percent of the global population do not have a car. A huge amount of people do not have a modern lifestyle - and they need improve of their possibilities to make trips, health care, access to education and so on to improve their living conditions.

Several aspects of modernization have caused unforeseen consequences *e.g.* there is a lack of knowledge of how to reduce the need of transport and even of reducing the amount of trips made by cars. Highly developed countries have not yet found out how to deal with the negative consequences of modernity *i.e.* the specific characteristics related to development during the last decades. It is time to integrate the side effects of modernity in transport into research in Social science. This implicates a shift in focus from the practical aspects of economic growth and technical solutions towards the needs inherent in humans and nature. Time has come to adapt visions of development to reality and, not the other way around. Research on the influence of automobility in society is scarce and knowledge of this kind is needed to developed adequate visions related to overall developing of community life.

The dynamic and constructivist elements in late modernity have not been fully explored. The political economy of social change can approach issues of environment, democracy and relate them to social change. The UNCED declarationen of Rio 1992 represents an incitement in this direction but as was recognised by the UN Conference in New York 1997 the Rio-declaration has not had the desired impact.

Economic and technological change is always possible and in fact, it is taking place daily. Social and political change is also possible however, I claim that the qualititive outcome when discussing personal transport depends on the possibilities of the public to play an active part in the design of the transport systems corresponding to their needs. Whenever a down-up approach is not taken seriously too many people will continue to suffer not only from the consequences of poorly analysed strategies for development but also from lack of transport since they are excluded from the group of car owners in the world.

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