

Changing frames of mobility: the Stockholm congestion tax

Tim Richardson*, Karolina Isaksson*, Anders Gullberg***

*Department of Development and Planning, Aalborg University, Fibigerstraede 13, 9220 Aalborg East, Denmark. tim@plan.aau.dk.

***Corresponding Author.* Department of Urban Planning and Environment, Royal Institute of Technology (KTH), SE-100 44 Stockholm, Sweden. Fax +46 (0)8 790 67 61 Email: Karolina@infra.kth.se.

*** Stockholm research institute, Box 15025, 104 65 Stockholm, Sweden. Fax: +46 (0)8 508 317 40 Email: anders.gullberg@stockholmia.stockholm.se

Abstract

The introduction of a congestion tax was a significant moment in the management of mobility in Stockholm. After several decades of lobbying and political conflict, the tax was introduced as a trial 2006, consented to by citizens through a referendum, and then adopted permanently in the summer 2007. Consensus on addressing the problems caused by the car in the city appeared to have been reached, and the final scheme was introduced to international acclaim.

This paper critically examines this apparent consensus on confronting car based mobility by analysing how mobility was framed at key stages in policy making since the 1970s through to the trial in 2006 and subsequent implementation.

The analysis centres on the place of the car in successive framings of mobility. Changing targets and objectives for urban traffic management are compared, and an attempt is made to trace winners and losers in relation to motility and environmental quality. Overall the paper attempts to show how congestion taxation was framed and reframed to produce dramatically different possible mobility interventions. This analysis is used to argue that the framing of future mobility changed fundamentally by the time the final scheme was adopted, and that a moment of ambivalence about the car, during the trial, was not used to confront car based mobility. Instead a persuasive story of successful implementation has allowed a new car oriented mobility regime to slip into place under the veil of a progressive policy intervention.

Key words

congestion taxation, mobility framings, mobility, motility, environmental consequences

1. Introduction

One of the most difficult issues to be faced in urban strategy making concerns the consequences of rapidly increasing personal mobility, in the form of private car use. Congestion, pollution, accidents and other problems related to private motorism has been on the planners and decision makers' agendas for years – but always proved difficult to turn into long lasting schemes for implementation. In the city of Stockholm, the discussion about how to “solve” the problems related to private car use have been going on for more than four decades. However, agreements have often failed. Therefore, the introduction of a congestion tax was a significant moment in the management of mobility in Stockholm. After several decades of lobbying and political conflict, the tax was introduced as a trial 2006, consented to by citizens through a referendum, and then adopted permanently in the summer 2007, to international acclaim. Except from a few remaining opponents like the chamber of commerce, there is now an apparent unity on congestion taxation as an effective measure for addressing the problems caused by the car in the city.

This paper explores this apparent consensus on confronting car based mobility by analysing how mobility was framed at key stages in planning and policy making on transportation infrastructure and mobility management since the 1970s, including the proposed “district charge” in the 1980s, the Dennis Package in the early 1990s, through to the trial in 2006 and the current scheme from August 2007 and onwards. The aim of this paper is to critically examine the place of the car in successive framings of mobility manifested in policy schemes to deal with congestion and other traffic-related problems in the city of Stockholm from the 1970s up till now. The analysis focus on changing targets and objectives for urban traffic management, and also power-relations embedded in each scheme, which we explore through the tracing of winners and losers in relation to motility and environmental quality.

Measures to control the car, such as congestion taxation, are at the leading edge of what has been termed a sustainable transport paradigm (Banister, 2008). This paper, however, begins with the concern that even such flagship policies for urban traffic management are often ambivalent about tackling car dependence. This despite the mounting evidence that current trends are resulting in damaging and increasingly unacceptable environmental and social burdens. Apart from certain significant experiments, most urban strategy making fails to seriously address these concerns. Counter-intuitively, even policies with the strongest potential to control car use, and here we concentrate on urban congestion charging, have not been designed to achieve environmental gains, and the more radical possibilities of these interventions are often weakened during implementation (Banister, 2003).

At a time when the future direction of strategic management of mobility is unclear, and where serious moral and political questions exist about whether and how radical measures to control car use can or should be introduced in different settings, it becomes important to examine closely the ways in which such controversial frames surface within strategy making processes, and how they are promoted, resisted, reshaped and ultimately institutionalized or silenced.

This paper pursues this line of inquiry, focusing explicitly on the dominant frames of mobility in policy making in Stockholm over a period of four decades. Focusing on policy debates on policy measures for congestion reduction, we explore how the different frames of mobility opened up new possibilities for action in this complex urban governance setting. Central to the analysis is the question of how actors sought to make the difficult choices and trade-offs implicit in seeking to manage urban mobility. We reflect on the potential consequences of different framings in terms of the associated patterns of mobility, motility (i.e “mobility potential”, see further below) and environmental qualities. Thus what is in focus is how the narrative of personal mobility by the private car shifted in successive dominant frames. We also seek to show how particular power-relations, at different times, played a part in the production of each frame. Overall, we attempt to trace how the successive debates over congestion taxation managed difficult questions about future urban mobility, and how the role of the car was treated in this.

We continue by explaining in a little more detail how we understand ‘framing’ of mobility, and introducing our analytical approach. This is followed by an analysis of frames of mobility, from early political debates about how to control access by car to the city of Stockholm in the 1970s and 1980s, to the Dennis Package in the 1990s, the congestion tax trial in 2006 and the adopted congestion tax scheme in 2007. This leads to a discussion of how controversial and contested aspects of urban mobility, in particular the role of the private car, were managed over time.

2. Framing mobilities

One way of exploring the role of the car in personal mobility, is to focus on how mobility – and especially future mobility – is framed at particular times and in particular governance settings. Governing mobility, through the planning and management of urban development and transport systems, involves the routine creation of ideas, concepts, and language, that together form a narrative of a new potential for mobility. A new potential future is offered, that will, according to the underlying logic of the narrative, lead to certain changes in mobility, for certain people and in certain places. Spatial plans and strategies, policies and physical measures, are conduits of such narratives, as well as arenas for their contestation. These narratives contain frames, which can be understood analytically as a coming together of a particular language of mobility, grounded in an underlying logic, or rationality, and applied in a certain context. The frame contains a problem to be solved, a course of action to be followed, a more or less reasoned justification for this, and a consideration of the consequences of doing so (Lautrup Nielsen and Gyldenlund Råby 2008). Analysing frames allows identification of these elements. By analysing how a single policy issue, policy measures to combat traffic congestion, was framed and reframed at different key moments in policy making over several decades, it becomes possible to trace the shifting nature of the problems, justifications, and consequences, and underlying logics that formed the policy narrative. This allows us to analyse how the congestion tax, in its different dominant formulations over time, engaged with personal mobility by private car.

Policy-makers, planners and other actors who act strategically to manage mobility do so partly by populating their imagined urban transport systems with imagined mobile citizens. This practice - the production of imagined mobile subjects - allows potentially persuasive stories to be crafted about sustainable and just future mobilities, assuming that a range of specified spatial interventions are carried out (ibid.). It becomes interesting, then, to analyse how certain forms of movement, for certain citizens, are put at the centre of policy. Here, we work on the basis that mobility is unequal, and that the framing of movement, as part of the process of managing mobility, is therefore an important locus of power struggles:

‘Access to and control over physical movement is unequally distributed. However, so is access to and control over assessing which activities can meaningfully be given the label ‘movement’ in the first place. Understanding movement in this way leads us to ask how various activities are given the status of ‘movement’, as well as how they are given meaning and importance, by whom and with what consequences’. (Frello 2008: 25).

This approach leads to a focus on the existence of winners and losers in all mobility frames. Identification of winners and losers might for example relate to the distribution of “mobility potential” – *motility* – among different groups of travellers or inhabitants in a city or region. Motility has been defined by Kaufmann as “the way in which an individual appropriates what is possible in the domain of mobility and puts this potential to use for his or her activities” (Kaufmann 2002:37, cited in Urry 2007:38). Determinants for the mobility of people are things like “physical aptitude, aspirations, accessibility to transportation and communications, space-time constraints, knowledge, licenses” (ibid). Also policy measures might be added on to this list as one factor that increases or enhance the mobility and motility for different persons and groups of travellers. There is thus a question of for whom, and on whose behalf, certain mobilities or motilities are supported (or not!) as part of mobility framings in policy measures.

It has been stated that “almost all mobilities presuppose large-scale immobile infrastructures [including] paths, railway tracks, public roads, [...] pylons, sewerage systems, gas pipes, [...] and so on” (Urry 2007:19 referring to Graham and Marvin 2001, Sheller and Urry 2006). These infrastructures does not only result in enforced fixity and coerced movement (Urry 2007:37 referring to Ray 2002), but of course also environmental, economic and social (etc) consequences on affected places and for mobile or immobile subjects. Therefore, an analysis of winners and losers should also take on board the distribution of possible and negative environmental consequences among residents and mobile subjects in affected areas. The analysis thereby takes the environmental justice framework (see e.g. Agyeman, 2005; Bullard, 2000; Hofrichter, 1993) as a point of departure. This leads us to the following questions which shape the analysis of each of the dominant frames, with its associated strategy for mobility management:

- What is the main objective of each mobility management strategy from 1970s and onwards?
- Who are the future “key mobile subjects” referred to in each mobility management strategy: whose mobility is put at stake?
- How do the measures aim to change mobility practices of these mobile subjects, and with what justifications?
- Who are the winners and losers in each mobility management strategy – in terms of mobility, motility and environmental qualities?
- How “radical” is each measure in terms of confronting car-based automobility?

Through the analysis of the successive frames we seek to establish the existence of continuities and discontinuities in the framing of mobilities. We aim to reveal whether a thread of policy rationality continues, or whether different logics prevail over time.

3. Successive framings of mobility in Stockholm

3.1 1970’s consensus on reducing car based-mobility by 20%

The late 1960s and early 1970s were years of growing criticism against increasing motorism and related schemes for investments in road infrastructure in Stockholm. In the late 1970s, the political parties in Stockholm agreed to reduce car use in the inner city with 20 percent, mainly as a consequence of new evolving standards for air quality. In the end, the parties failed to agree on the concrete policy measures (Gullberg and Isaksson 2008),¹ But in general, a combination of several measures was being discussed – such as restrictive parking policies, possible road pricing schemes and even prohibited entrance to the city by car. Worth to note is also that plans for extensive new road investments, which had been prepared in the 1950s and 1960s² were abandoned and the discussion was now more focused on measures to make more people chose public transportation (Gullberg (ed) 1998, Isaksson 2001). Both right-wing and left wing parties were open to congestion charging of some sort³ but the idea did not develop into any concrete proposal at the time. (Gullberg and Isaksson 2008).

As a result of a general economic decline and less people moving to Stockholm, car-use decreased spontaneously at the beginning of the 1970s (Skårfors 2001). Ironically, this meant that the discussion about measures to reduce car-use in the city eventually ran out of steam. When the 1970s eventually changed to 1980s, there was no longer any strong political will or momentum to go on with the measures to reduce car-based mobility (ibid. C.f. Tengström 1990.). One measure that was implemented in the

¹ The left party, the centre party and the stockholm party even argued for a 50 percent reduction (see Gullberg and Isaksson 2008).

² One example is “Traffic route-plan 1960” which suggested a full ring road around the city of Stockholm, see Gullberg (ed) 1998, Isaksson 2001, p 5).

³ With one exception: the left party was against congestion charging at this time because of distributive justice-aspects, but was supporting other means to reduce motorism.

1970s was however regulation of traffic in different parts of the inner city, where thoroughfare was banned – except on a few main roads. This evoked mixed reactions and motorist protests led to some mitigation. The result was some improvement in the local traffic situation but the influence on total traffic volume was small and more of an increase than the other way around.

The most distinctive feature of the mobility framing in the 1970s is that it actually was based upon a mutual understanding of the car as a problem for the city. Thus, there was a consensus on reducing motorism, as a means to improve the environmental quality in the inner city. At the time, environmental issues – like air pollution and noise – were main targets, but also congestion (Gullberg and Isaksson 2008). The mobile subjects in focus were car-drivers, especially those who used the car in the inner-city (ibid.). There was not any strong focus on other mobile subjects, like pedestrians and cyclists, but public transportation was one alternative transportation mode that was explicitly referred to. The motorists were the key mobile subjects in focus, as the ones to change behaviour. And it was when the discussions came close to the more specific means to make people change behaviour that the political controversies started to show. So in spite of a political majority supporting the decision to abandon massive road investments planned in the 1950s and 1960s, the 1970s did not see a turn towards policy measures specifically designed to change mobility practices.

3.2 District charges in the 1980s

The 1980's was a decade of economic recovery, and car-ownership increased – as did the amount of car-travels in total⁴. Thus traffic and congestion escalated in Stockholm (Isaksson 2001). In the second half of the 1980s, there was a reborn interest for environmental issues in Sweden, and the living conditions in main city areas was a central theme in the public debate – not the least in relation to private motorism and the negative consequences for health and environment (ibid). In their role as an opposition party, the social democrats in the city of Stockholm designed a proposal according to which Stockholm motorists would have to buy a SL-card (=card that allows a person to go by public transportation in the whole county of Stockholm) and put in the front window of the car when driving in the inner city. In the end of the 1980s, this idea of “district charges” was launched by the then leading coalition of the Social Democratic Party, the Left Party and the Stockholm Party⁵. According to the proposal, the revenues should go to investments in public transportation.

The district charge proposal was contested, not the least for legislative reasons.⁶ Critical voices were being raised from parties from the right, who were strongly against any idea to try to steer traffic in line with the proposal. However, they did not show so much of resistance to road tolls to finance new roads. But the idea was challenged also within the Social Democratic Party, and in the end, the proposal was never implemented, which later on has been explained in terms of internal ambivalence towards the idea. In addition, legislative concerns were being raised and there was also a strong lobbying against the proposal from motorist organisations (ibid.).⁷

One main target of the “district charges” from the 1980s was, in a similar way as the decade before, to improve the urban environment and reduce the negative effects caused by car mobility. In addition to this, however, was also the idea to indirectly collect more money for public transportation, by demanding the motorists to buy a SL-card. The idea was thus clearly addressing private motorists as a problem and the

⁴ Worth to note is perhaps that the early years of the 1980s was a period of time when car-lobbying grew strong. See Falkemark and Westdahl 1991 and Tengström 1990.

⁵ The district charge was in essence the very fundament for this coalition, since it was the main demand from the Stockholm party, i.e. their provision for cooperation with the other two parties.

⁶ According to a majority of Swedish lawyers, the district charge was in essence a tax, which resulted in a number of legislative complications, not the least since it is only the national parliament (riksdagen) that has the authority to take tax decisions. See Gullberg and Isaksson 2008 for a full explanation.

⁷ The result of this was eventually also a rift of the local coalition between the Social Democratic Party, the Left Party and the Stockholm Party.

ones to change their mobility practice. The motorists would be forced to support public transportation financially (by buying the SL-card) to be able to drive in the inner city. Thus, implicit in the design of the district charge was also the idea that once a person owns the SL-card, he or she might be more open to choose public transportation. The district charge can thus be seen as a mobility management measure that clearly attempts to change mobility patterns in a way that means a prioritisation of public transportation instead of private motorism.

The winners in the proposed scheme would be those traveller groups who prefer public transportation instead of going by car. Since the scheme would generate more funding for public transportation, it would also be a way to improve the public transportation system and improved motility also for persons without a car. Residents in the inner city, who would benefit from a cleaner environment with less car auto mobility in the city can be seen as another group of winners, as well as motorists finding it worth paying for a smoother mobility. However, since the scheme was never agreed on nor implemented, these potentially new relations between mobile subjects in the urban landscape did not come into force.

3.3 1990s: road tolls for new road investments in the Dennis package

The idea to charge motorists for using certain roads recurred in the 1990's, as part of the "Dennis package" that was a large scheme for infrastructure investments in the city and region of Stockholm (Isaksson, 2001). The scheme, which consisted of new investments in roads and public transportation, as well as the introduction of road tolls, was agreed on by the Social Democratic Party, the Moderate Party and the Liberal Party in the city and the region (Isaksson 2001).

The main objectives with the Dennis package were to improve the environmental quality, improve accessibility and strengthen the development of the region of Stockholm (Swedish Government 1990). The main part of the Dennis package, at least in budget terms, was a revival of the extensive infrastructure plans from the 1950s and 1960s – i.e. the construction of a ring road and an outer bypass (ibid.). Different kinds of charges were discussed in the political negotiation surrounding the design of the scheme. The idea that finally prevailed was that the road toll revenues would only be used to finance new road investments.⁸ One of the expected results of the proposed measures in the Dennis package was a reduction of car-use in the inner city with 25-30%. This should be seen in relation to the expected increase in car-use in the larger Stockholm region with 5-20% until 2005 (Länsstyrelsen i Stockholms län 1993:43).

The road tolls in the Dennis package were much contested. Certain actors, like transport economists, questioned the steering effects of the scheme, and argued that if people would have to pay for using the new roads, perhaps they would still prefer to drive through the inner city, which was not at all an intended outcome. Also environmental interest organisations, questioned the idea to finance new motorways with road tolls and were in general very negative to the plans to construct these new roads which they interpreted as a massive support of motorism (Isaksson 2001). The Dennis package was stopped in 1997, and thus the idea to introduce road tolls was abandoned, as well as the plans to construct the most costly of the new roads.

The target with the policy measures suggested in the Dennis package was something different than the measures discussed in the 1970s and 1980s. In the Dennis package, the idea was not at all to reduce motorism per se, but instead about managing automobility in a "more efficient" manner, by making car users drive around or bypassing the city while simultaneously collecting money for new large scale road investments. It was thus not at all an issue about questioning car-based mobility– quite the contrary: a certain amount of car traffic was needed to pay for the new roads.

⁸ There were also investments in both roads and public transportation that would be paid by the state and the municipalities in the greater Stockholm region. But the most costly new roads were to be paid for by road toll revenues.

The winners in the Dennis package was the motorists who found it worth to pay and also could afford the new road tolls, and thus did not at all have to change behaviour. Other winners were people living in the inner city where the main environmental benefits, like better air quality, were expected. Losers were those who could not afford to pay for getting a better accessibility by car, whose motility would decrease, but also those who were living in areas affected by new roads and increased traffic but were themselves not motorists, and thus not benefiting from the new traffic infrastructure. The Dennis package also included investments in public transportation. Still however, it would be doubtful to map out people using public transportation as winners in general of the scheme– in most cases it was more a question if slightly increased capacity and necessary renovations, with the new tram line connecting some of the near suburbs as an exception.

3.4 The congestion tax trial January – July 2006

The failed Dennis package was widely interpreted as an end to the idea to add new charges on car use in the city – at least in the foreseeable future. But a highly unexpected result of the election 2002 opened up a window of opportunity for the Green Party to push congestion charging into the negotiations with the social democrats locally in Stockholm as well as on the national level. The result was a parliament decision to implement a full scale congestion charge trial in Stockholm, eventually renamed to the congestion tax trial. The trial, which ran from 3 Jan 2006 to 31 July the same year, was a result of negotiations between the parties in the coalition governing Stockholm, i.e. the small Green Party, the big Social Democratic Party and the small Left Party. The collaboration around the congestion tax trial involved deep and difficult political tensions, not the least between the Green Party and the Social Democratic Party (see e.g Gullberg and Isaksson 2008, Isaksson and Richardson 2008). In the trial, a tax varying between 10 and 20 SEK was put on cars exiting or entering the cordon that surrounded the inner city of Stockholm, with an exemption for the main communication link Essingeleden that runs just outside the west part of the inner city (www.stockholmsforsoket.se, c.f. Isaksson and Richardson 2008). The trial also included increased capacity in the public transportation system, for example a number of extra bus-lines and more subway-trains running.⁹ During the trial, tax revenues were earmarked for investments in public transportation.

The formal aim with the congestion tax was to decrease traffic and congestion, enhance accessibility and improve the environment.¹⁰ The motorists were the key mobile subjects in focus in the scheme – it was their travel behaviour that was addressed most clearly. But also the current and future users of public transportation were key subjects – both in relation to the increased capacity in the existing system, and also in relation to how the revenues would be used.

⁹ Exemption clauses for emergency vehicles, vehicles registered in foreign countries, diplomat cars, military vehicles, buses with a weight of minimum 14 tonnages, so called "environmental vehicles" (according to the rules: cars driven by electricity, alcohol, or some other gas than liquefied petroleum gas, taxi cars, transportation service for old or disabled (after application), motorcycles, and cars with special permission (for example cars owned by physically disabled) (after application). There was also an exemption for vehicles going from or to the municipality of Lidingö, which is an island to the east of Stockholm inner city, and who can't be reached without passing the inner city and the congestion tax cordon. Vehicles going from (or to) Lidingö, and who only passed the cordon on its way out from the city did not have to pay the tax. More info at www.stockholmsforsoket.se.

¹⁰ The increased capacity in the system of public transportation was started already 22 of August 2005 and continued until the end of December 2006 (www.stockholmsforsoket.se).

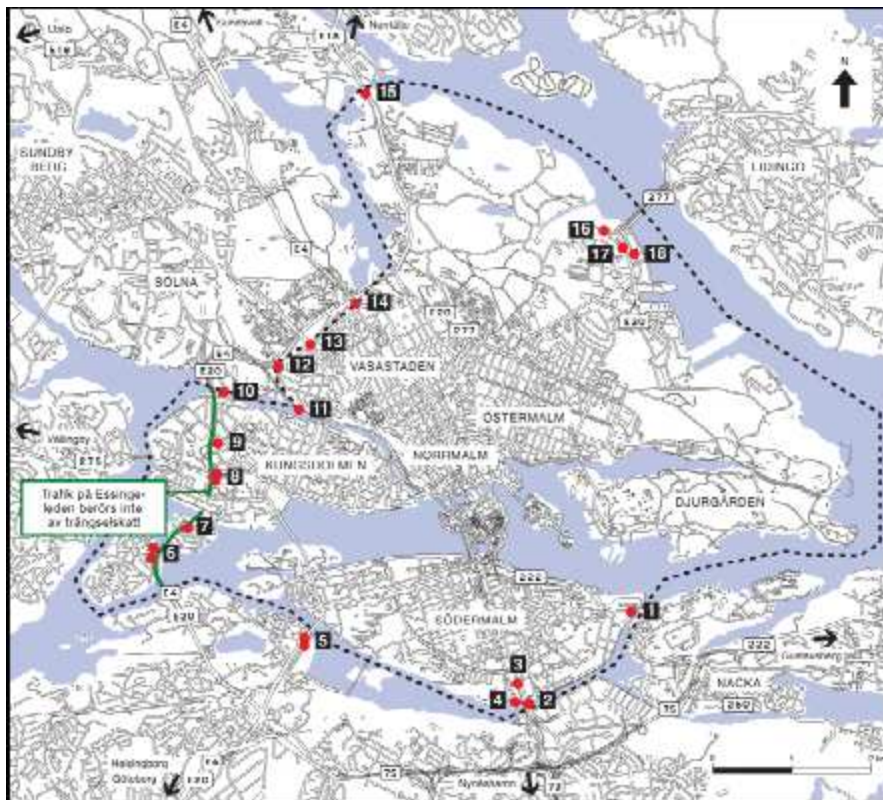


Figure 1. The congestion tax trial cordon and control points (marked as red dots). Source: The Swedish Road Administration 2006.

Even though the congestion tax trial clearly addressed car-users as the ones to change, it did not mean any radical change. In essence, the trial expresses a clear ambivalence rather than a challenge towards car-based mobility. This is manifested for example by the fact that the tax had to be paid by entering the cordon around the city whereas there was no tax for cars driving in the inner city, in combination then with main communication link Essingeleden not being included in the cordon. In addition, the tax was not that high – in the peak hour 20 SEK which is less than 1/5 of the price for entering the congestion charge zone in London.¹¹ Also the exemption for so called “environmental cars” is a sign of the ambivalence towards private motorism. Thus, the political negotiations around the trial had eventually resulted in a scheme that did not in essence challenge motorism. Instead, the main logic was about more cost-effective mobility management, where the differentiated tax made travellers use travel mode and timing in relation to the tax at each hour of the day.

One specific group of winners of the congestion tax trial was therefore those who could afford to pay for their car-based urban mobility and who also thought that the benefits actually exceeded the cost of paying the tax. Among motorists, those living in the inner-city who did not need to pass the cordon had an especially privileged position in this scheme, since travel speed and accessibility by car was improved for motorists in the inner city during the trial (Transek 2006a). Altogether, most inner city inhabitants were benefiting strongly by congestion reduction and improved environmental quality such as less pollution and particles in the air (SLB 2006). Also specific lines of business, such as transportation firms, taxi drivers etc should be mentioned as winners. They benefited greatly from a generally improved mobility potential: in essence they could get more jobs done – to a low cost. Another group of winners was high-consumers of public transportation, especially those who lived in areas benefiting from new extra bus-lines or

¹¹ The congestion charge in London was in 2007 £8 for entering the zone, which at the time corresponded to around 110 SEK.

improved capacity, whose motility also was enhanced. Losers were those living in areas where congestion and thus also emissions actually increased (for example in semi-central areas in south-west and south-east, just outside the cordon) (ibid.). Evaluation reports have also identified certain professional groups, such as bus drivers both in the inner city and in semi-central districts in suburbs to Stockholm suffered from higher exposure to NO₂-emissions during the trial than before (Plato, Carlsson, Alderling, Gustavsson 2006). It is however very uncertain to what extent this is a direct consequence of the congestion tax scheme or not. Anyhow, it illustrates the fact that air pollution is a complex matter, and that a general picture of emission reductions still might imply increased exposure at specific locations and groups of residents or travellers.

3.5 Congestion taxation supporting new roads: August 2007 and onwards

The congestion tax trial was closed in the end of July 2006. A local referendum was held in mid-September, resulting in a small majority for the congestion taxes. Simultaneously however, the public election resulted in new political majorities. Thus, a right/liberal government took over both in Stockholm and nationally. The situation was complicated: the two main right/liberal parties in the city (i.e. the Moderate Party and the Liberal Party) had invested much credibility in opposing the congestion tax trial – but the national party organisations had a clearly more ambivalent position, and also the other two parties forming majority coalitions (the Centre Party and the Christian Democrats) were positive. In addition, there was a proven majority for the congestion tax locally in Stockholm. So how would they go on with the issue?

Soon after the election, the new national government decided that a regular congestion tax would be introduced 1 Aug 2007, but with several changes in relation to the trial. For example, the tax was now made deductible. The fine for unpaid congestion tax was reduced. The exemption for “environmental cars” was limited to five years, and now also taxi cars and transportation service for old and disabled had to pay the tax (Swedish government 2007). And, most notably, the tax was now made part of a larger infrastructure plan that included large scale investments in new roads and railways in the city and region. Instead of using the revenues for investments in public transportation, which had been the case during the trial, the money would now be earmarked for “the Stockholm Bypass”, a large road project reaching from south-west to north-west in the outskirts of the city region, very similar to parts of the old plans from the 1950s, 1960s and 1990s (Reinfeldt, Olofsson, Leijonborg, Hägglund 2006). The Stockholm Bypass and the congestion tax are today intimately connected in the multi-nodal development strategy for Stockholm region (Stockholmsförhandlingen 2007).

The main targets of the new system for congestion charging is now said to be about improving the environment, the accessibility and to contribute financially to new road investments in the Stockholm region.¹² From these formal aims it is clear that the target this time is not about changing mobility patterns. Rather, it is about “effective” mobility management, which in turn is supposed to have positive effects for environment and accessibility, and also about funding new infrastructure in itself.

The mobile subjects in focus are again the car-users, who obviously are the ones to change – however not necessarily by travelling less but by using the road system in a more efficient way. The regular scheme for congestion taxation is currently not connected to any massive efforts for improving public transportation in the city or region. This also changes the pattern of winners and losers radically in relation to in the trial. Motorists who can afford to pay for their car-based mobility form an even stronger group of winners than before; the new regulations for tax deduction have made the price effectively lower. Just as in the trial, residents in the inner city, who use the car for travelling within the inner city, are also winners. A new group of losers is however appearing – for example people who live in areas where new roads will be

¹² http://www.vv.se/filer/28704/Trangselskatt_foretag_org.pdf, 25 July 2008

constructed without benefiting from the new infrastructure, or (like in the trial) those who live in areas where congestion actually increases.

4. Concluding discussion: frame shifts

The empirical analysis above is a clear illustration of continuous struggles over the place of the car in the city. In this final section, based on our analysis of successive framings of urban mobility, we reflect upon the overall picture: how have the controversial issues of the place of the car, and of urban mobility in general, been managed over time in Stockholm, and who are the winners and losers?

4.1 A general ambivalence about the role of the car in the city

There is one striking characteristic coming out from this historical exposé, namely the fundamental ambivalence over the place of the car in the city. Over time, private car use is constantly appearing as the main problem to tackle, but still only very few of the policy measures described above challenge private car use in any radical sense. Motorism was most clearly under attack in the policy debates of the 1970s, and to some extent also in the 1980s, but no concrete policy measures were implemented. The Dennis package from the 1990s was not at all about challenging the role of the car, quite the contrary. The congestion tax trial carried a seed for questioning urban motorism, but in the end it still didn't do much about automobility per se. The main evaluation report states that congestion was noticeably reduced (on average 22% reduction on entrance roads to the inner city) (Stockholms stad 2006, p 5). Meanwhile however, the total reduction in terms of amount of travels in the region is much less – around 3% – and it is not known if there was any loss at all in total travel length (travelled kilometres by car) in the region (ibid., p 66). The current system for congestion taxation is even less clearly targeted towards car use in the city. It aims for congestion reduction, yes, but is simultaneously serving as a direct financial support for the construction of new motorways. In the current congestion tax system, motorism is thus even less confronted than before.

4.2 Mobility norms

What are then, altogether, the mobility norms being manifested in the different mobility framings traced in this article? One main result is of course the eventually increased valorisation of the private car. Public transportation were explicitly valorised in the policy measures discussed in the 1970s, 1980s and also partly in the trial – but eventually, with the permanent system, it is not treated as an as important system as private motorism, only a complement of subordinate importance for the general urban and regional development. Mobility in itself is not questioned in any of the policy measures in focus here – except for the very marginal suggestions for entrance prohibition that was part of the policy debate in the 1970s. Whereas a number of specific traffic modes has been questioned and challenged, the existing trends and tendencies of ever increasing mobility are taken for granted as essentially “good”. Moreover, the idea of frictionless mobility is more and more valorised over time, and is now clearly an essential part of the long-term development strategies for Stockholm. Less mobility is thus not even an issue on the agenda.

4.3 Winners and losers

The empirical examples above clearly illustrate how the prevailing support for car-based mobility that is manifested through the policy measures result in patterns of uneven distribution of both mobility, motility and environmental benefits such as cleaner (or less clean) air, more (or less) noise, safer (or unsafer) environments in terms of accidents and generally improved (or reduced) accessibility. As stated above, the congestion tax have meant different consequences for different businesses branches and professional groups etc. Over time however, the policy measures show a general tendency to benefit motorists who can afford (and find it worthwhile) to pay for their car-based mobility, and also residents in the inner city, who will benefit from less congestion and improved living environment in several respects. Meanwhile, there are new groups of losers– in general people who don't travel by car but live in areas where new roads will

be constructed, or in areas where congestion actually increases in the short or long run due to the congestion tax and/or new infrastructure investments and the new patterns of car-based mobility evolving in relation to these.

4.4 Stockholm – a ‘two speed city’

The evolving pattern of winners and losers is closely related to the idea of the ‘two speed city’ – a concept referring to the idea of a city with two layers of mobility – one layer of smooth, quick and easy mobility, and another layer where travelling is slow, with much friction and disruptions. In a ‘two speed city’, different groups have different motility potentials depending on for example income, class, technical equipment, location etc and the concept also indicate that the motility is unevenly distributed. Of course, the ‘two speed city’ has to some extent been part of the situation in Stockholm since the idea of the “car city” was established as norm in Swedish city planning (c.f. Lundin 2008). What we can see in the policy measures analysed above however, is that this rationality appears stronger and stronger over time in Stockholm mobility planning. Also, it seems to be closely connected to an uneven distribution of positive and negative environmental consequences of each system. In trial as well as in the the permanent system, enhanced mobility and improved environmental quality is a stronger result for inhabitants in the inner city than for residents in semi-central or peripheral parts of the region. Thus there are obviously environmental injustice aspects of the current congestion tax – especially if the planned infrastructure investments are actually implemented – but more research is needed to map out the complex picture more in detail.

4.5 Stockholm congestion taxation supporting the status quo?

The analysis carried out in this article has focused on policy measures designed to combat congestion in Stockholm from the last four decades. Even though the examples are diverging, and thus all appear as specific products of a certain historical, political and social context, they also show a consistent thread of policy rationality. All in all, even though the policy measures involves certain attempts to question car-based mobility (at least in the 1970s, 1980s and, to some extent, in the congestion tax trial), there is in the end no radical confrontation of private motorism. The consistent rationality is thus one of fundamental ambivalence about the car, but still – in the end – a strong(er) support for its strong position as an urban travel mode.

The analysis also illustrates how measures like congestion taxation as an instrument might be framed and reframed to produce dramatically different possible mobility interventions. In Stockholm, the framing of future mobility changed between the congestion tax trial and the adoption of the final scheme. The decision 2002 to implement the trial was as a moment where the car was challenged to some extent – at least in the early political discussions – but in the end, the trial was still not designed to radically confront car based mobility. Still however, the Stockholm congestion tax has in several ways meant a radical shift for mobility management in Sweden as well as in other countries, not the least by showing the potential to not only reduce congestion but also win public support for such measures. But – as shown in this analysis – the result is in itself ambiguous. In essence, the “success story” of the Stockholm congestion tax trial can also be interpreted as a policy process that eventually allowed for a new car oriented mobility regime to slip into place under the veil of a progressive policy intervention (c.f. Isaksson and Richardson 2008).

This is also a direct input to the ongoing international debate about congestion charging, where some writers recently have defined it as a sustainable transportation policy measure (c.f Banister 2008). The result of this analysis gives input to question simplistic attitudes towards congestion charging as essentially sustainable. The current congestion tax in Stockholm is a clear example showing that reducing congestion might very well be part of policy schemes that support, rather than challenge car-based mobility. Congestion taxes and congestion charging *might* very well be measures to support a transformation to other, less unsustainable mobilities, but not necessarily and certainly not automatically. It all depends on what power relations and what frames of mobility that is built into each specific scheme for mobility management.

References

- Agyeman, J. (2005). *Sustainable Communities and the Challenge of Environmental Justice*. New York: New York University Press.
- Banister, David (2003) Critical pragmatism and congestion charging in London. *International Social Science Journal* 55(2), 249-264.
- Banister, David (2008) "The sustainable mobility paradigm" *Transport Policy* 15 (2008) 73-30, Elsevier.
- Bullard, Robert D. (2000). *Dumping in Dixie: Race, Class, and Environmental Quality*. Atlanta: Westview Press.
- Frello, Birgitta (2008) "Towards a Discursive Analytics of Movement: On the Making and Unmaking of Movement as an Object of Knowledge", *Mobilities*, 3:1, 25 – 50.
- Falkemark, Gunnar and Westdahl, Peter (1991) *Att offra Västskusten. Det politiska och rättsliga spelet kring Scan Link och motorvägsbygget i Bohuslän*. Rabén och Sjögren, Stockholm.
- Graham, S and Marvin, S (2001) *Splintering Urbanism: Network Infrastructures, technological Mobilities and the Urban Condition*. London: Routledge.
- Gullberg 1998 (ed) *Stockholm blir stor stad. Tiden 1948-1998*. Byggförlaget, Stockholm.
- Gullberg, Anders and Isaksson, Karolina (2008) "Stockholmsförsöket – sagolik succé eller försåligt fiasko", in Isaksson, Karolina (ed) *Stockholmsförsöket – en osannolik historia*, forthcoming on Stockholmia förlag, Stockholm.
- Hofrichter, R. (ed.). (1993). *Toxic Struggles: The Theory and Practice of Environmental Justice*. Philadelphia: New Society Publishers
- Isaksson, Karolina (2001) *Framtidens trafiksystem? Maktutövningen i konflikterna om rummet och miljön i Dennispaketets vägfrågor*. Linköping Studies in Arts and Science no 231.
- Isaksson and Richardson 2008 "Building legitimacy for risky policies: the cost of avoiding conflict in Stockholm" forthcoming in *Transportation Research A*.
- Kaufmann, V (2002) *Re-thinking mobility*. Contemporary Sociology. Aldershot: Ashgate.
- Lautrup Nielsen, Anne Marie and Gyldenlund Råby, Dorthe (2008) "Congestion Charging in Stockholm and Copenhagen – a Break with Car Dependency in Planning?", Aalborg Universitet, Department of Development and Planning.
- Lundin Per (2008) *Bilsamhället. Ideologi, expertis och regelskapande i efterkrigstidens Sverige*. Stockholmia förlag, Stockholm.
- Länsstyrelsen i Stockholms län (1993) *Dennis och miljön: en översiktlig bedömning av Dennisöverenskommelsens konsekvenser för miljön i Stockholmsregionen*, rapport 1993:6.
- Plato, Nils, Carlsson, Annika, Magnus Alderling, Per Gustavsson (2006) "Bussförarens exponering för avgaser före och under Stockholmsförsöket". Rapport från Arbets- och miljömedicin, Centrum för folkhälsa 2006:6. Stockholms läns landsting.
- Ray, L (2002) Crossing borders? Sociology, globalization and immobility", *Sociological Research Online*, 7:1-18.
- Reinfeldt, Fredrik, Olofsson, Maud, Leijonborg, Lars, Hägglund, Göran: "Vi säger ja till trängselskatten för att finansiera kringfartsleder", *Dagens Nyheter* den 1 oktober 2006.
- Sheller, Mimi and Urry, John (2006) *Mobile Technologies of the City*. London: Routledge.
- Skårfors, Rickard (2001) *Stockholms trafikledsbyggnad. Förändrade förutsättningar för beslut och implementering 1960-1975*. Uppsala Studies in Economic History 58.
- SLB 2006 "Stockholmsförsöket. Effekter på luftkvalitet och hälsa", SLB-analys (Miljöförvaltningen i Stockholm samt Stockholm och Uppsala läns luftvårdsförbund) 2006.
- Stockholms stad 2006 "Fakta och resultat från Stockholmsförsöket. Andra versionen – augusti 2006".
- Stockholmsförhandlingen 2007: "Trafiklösning för Stockholmsregionen till 2020 med utblick mot 2030", Carl Cederschiöld den 19 december 2007.
- Swedish government 1990. Directive 1990:21 from Government meeting 1990-04-05.

Swedish government 2007. Press release on the new congestion tax scheme 12 april 2007.
Tengström, Emin 1990. "Bilsamhället: Bilens makt och makten över bilismen", in Beckman, Svante (ed) 1990 *Miljö, media, makt*. Carlssons 1990.
Transek 2006a "Invånarnas upplevelser av stadsmiljön före och under Stockholmsförsöket 2005-2006", Transek rapport 2006:23.
Urry, John (2007), *Mobilities*, Polity.
www.stockholmsforsoket.se