# **DOCUMENT AUTO- AFHANKELIJKHEID**

Auto afhankelijkheid is een belangrijk thema. In dit document zijn 5 artikelen of lezingen opgenomen gekoppeld aan de hoofdoorzaken. Er is een viertal hoofdoorzaken voor auto afhankelijkheid.



Auto afhankelijkheid is overigens een recent fenomeen. Pas in 1975 werd meer dan de helft van alle afgelegde kilometers in ons land met de auto afgelegd. Het verschijnsel is dus pas 46 jaar oud. Op dit moment groeit de autoafhankelijkheid – het aantal kilometers dat redelijkerwijs (70 % extra tijd voor alle andere vervoermiddelen wordt dan aanvaardbaar geacht) niet anders dan met de auto afgelegd kan worden beduidend sneller dan het aantal autokilometers. Dat ligt vooral aan ; steeds meer werkgelegenheid op snelweglocaties, stroomlijning openbaar vervoer (minder haltes) en uitbundiger vrijtetijdsgedrag, nacht, late avond, natuur.

Is hier iets aan te doen? Vanzelfsprekend. Dit is de lijst;

- 1. Sanering groot deel van de snelweglocaties
- 2. Rol werkgevers; afschaffen leaseconstructies, afschaffen autokostenvergoeding, taakstellend mobiliteitsbudget, voorrang voor de fiets, thuiswerken stimuleren
- 3. Geen investeringen meer in zgn. wegbereikbaarheid maar wel fors in OV
- 4. Autovrije zones in steden fors uitbreiden
- 5. Beter gebruik bestaande autocapacitieit; nu 1,36 mens per auto!
- 6. Samen angst voor openbare ruimte wegwerken
- 7. Minder koersen op gemak
- 8. Snel beprijzen per kilometer invoeren

We beginnen dit document met een tekst over snelweglocaties (2-19). Dan volgen twee teksten over tijd, tijdstress en de rol van werkgevers (20-34) . Daarna volgt een paper over de rol van angst en vooral angst voor de openbare ruimte (35-50). En tot slot een nooit gepubliceerd artikel over gemak, comfort en instant gratification (51-62).

We beginnen met de **snelweglocaties**.

# NEO -LIBERAL PHYSICAL PLANNING: HIGHWAY LOCATIONS, ACCESS FOR ALL, AND GLOBAL WARMING

# **OR: RETHINKING CAR DEPENDENCE, 2017**

Nationale planologielezing, RU Groningen, 2017

## Ladies and Gentlemen

Compared with 40 years ago the perception of our highway landscape has changed. As a kid I was used to see this,



but now, at least, at many locations I am supposed to see this.



We created in the meantime many highway locations.

I do not know whether you ever wondered, but highway locations are rather country – specific. Take our two neighbouring countries. When I studied, in the seventies, we were afraid of *"Belgische toestanden"*, looking at the way of non- physical planning in Flanders.



And on the other side we have Germany. Did you ever see offices and warehouse -boxes immediately along the Autobahn?

So our country has more or less moved from Germany to Flanders in its use of the space near the highways.



But what was the role of physical planning, and the role of the thinkers on physical planning, the "planologen", in this development?



My proposal for you for this next hour is to reflect on the situation in a triangle. A triangle formed by three elements; **neo-liberal physical planning, accessibility, and global warming.** Right in the middle of this triangle is one of my favourite study objects ; car dependence.

#### **Neo- liberal physical planning**

My lecture will be as practical as possible. I will use three examples. The first is about the **highway locations**. Here they are again.



As you probably know at this moment 40 % of our employment is at these sort of locations, and this share is still growing. It grew fastest in the first decade of this century in areas at less than 1,2 kilometers from an entrance lane to a highway. What was created was a great mono- functional

landscape of buildings looking like boxes, with sometimes a hotel, a "*meubelboulevard*", big DIY shops, and sometimes, as you see here in Ede, a cinema complex.



But mostly it are just working landscapes, with

what I call "fast architecture", buildings from a prospectus.

Were these landscapes ever designed, were they planned? Let me give the answer via the PBL, Planbureau voor de Leefomgeving (1). In their contribution to last year's International Architecture Biennale they write on this theme:

"Municipalities developed new industrial and office zones along highways. The buildings have a functional and abstract design. There are no public services to be found. And the new places for work are only accessible from the highway"

This is all stated rather neutral, but behind this is a quite interesting phenomenon. Who was the leader in development?

The municipality. The same municipality that tries to convince you, with their Local Sustainability Agenda 21, to divide your waste in five boxes, and proposes an integral view for their central area, creates also areas that can only be accessed by the highway, that have no real public space, and that are completely mono- functional.

Do municipalities have two faces?

Or is there an underlying pattern? I would like to move with you to the four ways on studying mobility to clarify this a little bit (2).



Four ways to study mobility. The way we all know, is predict and provide. You predict the amount of activity, then the amount of traffic as a second level, the derived demand, and you just provide what is needed. No choice, no policy from prediction onwards, just providing. This is what once, long time ago created the battle between the planners and the builders. The builders just provided, and the planners took an opposite position trying to create interesting and important new public spaces with quality.

Then we move to the right side of the scheme.

There you see Sustainable Mobility, trying to get mobility sustainable. This asks for many choices, and not just provision. Below we have Cities as A Place, finding its basis in the work of the beloved Jane Jacobs (3), and finding its heyday in the seventies, but again popular nowadays.



And in between we have smart mobility, the newest approach. To that approach I will come later in this lecture.

But now : where does our modern municipality stand? I would say everywhere. Their politicians and policy makers try to convince us of the need to be sustainable, create nice integral city centres, banning the cars a little bit, and create at the same time fully car- oriented locations at a rapid pace. Looking with our eyes that seem to be the dominant trends. Everything at the same time, but a domination of just providing....

From these highway locations I will move to my second example, the **Vinex areas**, and specific **the ones build at a distance from the city centres**. Neighborhoods, or better complete citylike structures such as Leidsche Rijn, Reeshof, Haagsche Beemden, mostly some 10 kilometres from the real city. Together with Jos Arts I edited the *book Builders and Planners, A history of land- use and infrastructure planning in the Netherlands* (4). In this book is a great chapter on how Leidsche Rijn was build, written by Nel Disco and Frank Veraart, under the heading of *A farewell to big planning 1990-2010*.



It concludes that most Vinex areas had to be built in an intricate interplay between the business community world and the public organisations. And with a business model based on value capturing related to ground positions and project development that has been lost in the last economic crisis. National physical planning was already weakening at the time these Vinex locations were build, and the authors conclude that "many features and aims got lost in transition from the national to the local level, despite efforts of the part of the national, and also local governments to constrain and seduce the participating actors". All Vinex outlying neighbourhoods have the same characteristics; a whole spectrum of housing types, a struggle to get good functioning shopping areas, a lack of other functions, a great physical and also psychological distance to the real city it seems to belong to, and on average rather happy inhabitants.

In the creation of these Vinex areas the struggle was between just providing nice housing, and creating an environment with a new and modern integration of activities. And the provision of housing did win.



I consider in this respect the first battles in Vinex areas, leading to giving up planned green spaces to create far more parking space near the houses, an interesting illustration.

Moving to the last example. The **rural areas**. What has happened here? Well basically, the vision of one of my educators, prof. J.P.Groot, rural sociologist from Wageningen, did become reality (5). He always talked about villages without shops as the reality to come. In all parts of Europe, rural areas have a difficult time in keeping their services such as shops, health care centres and employment. Nearly everywhere rural areas did become car- country. For the always 15 (or more) per cent of non-car households something changed. The great busses left, and were replaced by target- group transport, and by demand responsive transport. Often this is presented as a great solution, but some elements are important here.



For my new book *Inclusive Transport*, I studied those demand responsive transport systems. What mostly happens is the following. The busses are replaced by minibuses, and governments are reluctant to introduce broader and integral coverage of DRT services. These services create more budget uncertainty with their flexibility offered. And, as Mulley et.al (6) notes, the relative high costs per passenger trip mean that services are often offered more limited than passengers prefer.

Most limitations are set on the number of vehicles, meaning longer waiting times, and less flexibility. To present two examples; in the province of Gelderland the Regiotaxi was so successful, that it just became too expensive for the regional authority, who did aim at creating greater flexibility, leading to diminishing services for the user (7).



And as the Noordelijke Rekenkamer did write recently, the same could happen in Friesland, with the Opstapper (8), who drives a few hours on a day, after reservation, with no services in the evenings, and on the weekend. So when demand responsive transport becomes a success it just gets too expensive, and the system is closed down or diminished. Now, what brings these three examples together? *Provision of services*. Spaces along highways are provided for rather mono- functional economic occupations, spaces at some distance of cities are created for rather mono-functional nice and friendly housing, and provision of public transport in rural areas is considered to be form of charity.

In some ways it seems a successful approach. In the *Balans of the Leefomgeving* the PBL concluded in 2014 that on highway locations there were 2,5 time as much jobs than at the "the great hobby of the physical planners", the multimodal knots (multimodale knooppunten). And the greatest increase in inhabitants was also at highway locations, this time mostly Vinex (9).

However: this all seems rather far away for the vision- oriented physical planning of the time when I studied. I would state that all three examples are expressions of the neo- liberal ideology, which came to dominate after 1989. We see mono- functional provision on what a majority of households and enterprises seem to want, with the business communities in the lead, and with rather minimal provisions for non- majority wishes.

#### Accessibility

Let us now move to accessibility, the second part of the triangle. Are our three examples accessible for all households? Starting again with the **highway locations**. Well, they have a great access to highways, so much is clear. But as again the PBL concluded; 60 % of all employment growth in the last 15 years took place at these locations that could only minor, or completely not, be reached by public transport.



Highways in the Netherlands are badly served by fast busses. This thanks to a policy originated by the Dutch Railways stating that when there is a train running between two cities it is not allowed to create a fast bus-service between that same two cities. So we miss forms of Bus Rapid Transit along our highways. And quite often it is also difficult to reach these highway employment hubs by bike, as you have to cross the highway that form their basis. So, in the time in which we already had Brundtland, since 1987, and sustainability with us, *public authorities did create complete car dominated locations, with now 88 % of users going by car.* 

We move to the Vinex locations. Yes, there is appropriate public transport here. No problem. But



most Vinex locations are also very near to highways. Let us have a look at Haagsche Beemden, the big Vinex location in some way related to Breda.

Below you see what happens. From Haagsche Beemden by car (in red) you are immediately able to move to Dordrecht, Rotterdam, or Eindhoven. To do the same by public transport (in black) takes you a while. You first have to move

to a station and then more or less see your neighborhood again. It also costs you certainly more!

Here we have two lines of thinking. The one from the planners expecting that people would move



from their house by public transport to a station, then by train to the municipality where they work and then again by bus or by bike to the work location. And the wisdom of the real world just picking the car on your own when you move from your Vinex house to your work the highway, near just creating and accepting congestion.

Where this Vinex reality also has led to is described in a great manner by Arnold Reijndorp in 1998, in my opinion one of the best writers on physical planning in our country. In his Buitenwijk (10), he uses Haagsche Beemden as an example.



As Vinex- areas are often situated nearer to highways than to the cities where they form part of, the inhabitants of Haagsche Beemden oriented themselves to locations within easy reach via these highways. These inhabitants liked their house, were often rather indifferent to their neighbourhood, but liked the location of their neighbourhood on the Dutch map; everything is within easy reach, at least by car. The possibilities that the highway offers in terms of reaching other cities were far more important than their orientation towards the city of which they form the utmost outlying part (sometimes over 10 kilometers from the city centre). They did not feel inhabitants of Breda. And social life for these inhabitants is not concentrated in their new neighbourhoods. Their neighbourhood is just the first step in the wider areas where they live and create their activity spaces.

What is now happening at highway locations and at Vinex areas is what the urban planner Melvin Webber came to expect in 1964 when he created his vision of the "*urban non – place realm*" (11), areas that belong nowhere but are functional in all circumstances. I can present his vision in words, but better in a picture.



Non-place Schiphol Airport Final Presentation 15 april 2010

Perhaps a word about emotions. Here again a famous word has been coined (12). These non- places are known for their "community light", modern people want some contacts in the neighbourhood, but in a light form. They want to identify with their neighbours in a way characterised by a certain distance in combination with easy, but not very deep, contacts. No way to build real communities here.....

Now to the **rural areas**. What has happened here can best be described by the *ladder of marginalisation of public transport*.

Households without cars that are not disabled, very old, or in severe health problems, are now depending on charity, of public authorities- will they keep financing their minimal provision?, or of volunteers- will they keep doing their hobby as a bus driver, driving the last minibus....?



#### THE LADDER OF MARGINALISATION OF PUBLIC TRANSPORT

OK, but are these accessibility problems of not being able to reach employment without a car, of far more difficult leaving Vinex for non- car users, or of dependence on charity in rural areas receiving attention in the political or societal spheres?

Not so much. And I see three explanations here.

The *first* moves back to neo-liberal ideology. "*It seems just taken for granted*." Car dependence is with us, at least outside the real cities. And car dependence is still growing at a far faster rate than car use. As now around 45 % of all car trips cannot be made in a reasonable way by other modes (even as they are allowed to be 70 % slower), and this will grow in the next decade to 60 %. The growing car dependence in all western societies has un- intentionally got the characteristics of an extreme liberal project, liberal in the sense of that high priest of neo-liberalism, *Margaret Thatcher* when she spoke her famous words; "*there is no such thing as society*". The car fits perfectly in a system to let everybody

be happy in its own way. Except than for the laggards, but here we have that other great quote of her; "when a man of over 26 is still on the bus, he can consider himself to be a failure".

Somewhat more theoretical I like the approach of Stephan Rammler (13). In The *Wahlverwandtschaft of Modernity and Mobility* he explains that modernisation is in essence a process of structural differentiation. What formerly belonged together- shops near to factories or houses- is now dispersed, with each element creating its own geographical niche. But this differentiation can only exist with a parallel process of integration. And car mobility takes care of this spatial integration of the differentiation. That is why everybody seems rushing around so much...



Second element is the "disappearing trick" that we did in our country with the word accessibility in national policy. It is clear for me that people living here (see picture) without out a car can face accessibility problems, as they will have difficulty moving to hospital , shopping centres, or work locations, at all times, giving low frequencies of transport.

But how is accessibility mostly framed by politicians and policy makers? The most important accessibility

problems that we seem to face in their opinion is the following. When you expect to be able to drive from Amsterdam to Rotterdam in 55 minutes, and it takes you 67 minutes, you have a loss of 12 minutes, which you could have used in a more economical way. That is the politician's definition of accessibility, in Dutch called *bereikbaarheid*.

This way of framing accessibility leads to considering congestion as the real great accessibility problem in modern countries. Two remarks here. One: we just create more every- day congestion by realizing so many locations near highways. And two; as long as cars have 5 to 7 seats, and are occupied by only on average 1,38 human being, I consider congestion a problem of transporting air. And the way of framing accessibility problems via "hours lost" obscures the real accessibility issues, as Danielle Snellen did show in 2012 (14).

The *last* explanation leads us to the core of provision of services in modern western societies. Together with Karel Martens I made a study on the provision of other important services to the public (15).



Health care and education are provided from public budgets, at least in great majority. For housing we have provisions on social housing and on mitigating rents for poorer households. But now on transport, what do we have with people facing access problems? We have a budget for public transport, hope for the best, and do some charity. In essence, it is hoped that people find their own provision, as, other than in the three other domains, a right on appropriate mobility, or better on good access to services is lacking. We need to bring fairness in our transport system (16). But this seems at odds with neo-liberal ideology.

So what happened in recent decades? We created many car dependent areas, and we made accessibility for non- car owning households and individuals outside the urban areas worse. And it all is related to our subject area of study; *planologie*. To the above -30 years of age in my audience I would like to ask; "Where we you, when this all happened?"

But before answering this question I let the orchestra of global warming moving in.

#### **Global Warming**

I hope I have sceptics in the audience. A line for this scepticism could be; *so what, where is the problem?* Yes it is a pity for the rural households without cars. But let them buy cars or move. And for the rest, most Vinex households are happy with their house, and most employers are happy with their location. So ; what's the point....

My answer could be in the normative. I cherish, as do many people worldwide, the tradition of Dutch physical planning, with its vision and quality oriented interventions and I consider a replacement by a sort of "business as usual", as we see the developments sketched in almost all OECD countries, as a step back.

But there is another frame that could be used in answering the sceptics. Let us move to Paris, or better; to the Paris agreement on global warming. To stay behind the "lower than 2 degrees more"- objective we need to move back some 80 % with our CO2 emissions in 2050, compared to 1995 levels. And in transport levels have grown. Even more, as the only societal sector transport is still growing in its emissions.

Aandeel per sector in de totale CO2-uitstoot in Nederland



Transport is now for 18 plus % responsible, with some 73 % for road transport, with a majority for passenger cars.

Can we make a move to this 80 % less? A broad and comprehensive answer to this question is in recent years overshadowed by the perspective of a revolution towards electric driving that probably will come. Politicians hope that their citizens and lease companies will buy electric cars. That probably will happen, but the time schedule will be crucial. A little bit of counting. When we follow the Dutch Government, the idea is that in 2035 we will reach a 100 % electric in the new cars sold. That brings us to some 17 % electric cars in the car fleet in 2030 and a 100 % just before 2050. When we follow the idea of the majority in the last Dutch Parliament, 2016, and should be able to reach the 100 % in 2025, than we can have 40 % electric in the car fleet in 2030, and could reach a 100% in 2042. But when we follow the recent proposal of the European Commission this leads us to a mere 7 % electric in 2030 and a 100 % behind 2050.

All this counting is done because many stakeholders feel that only electric can do the job. We just move from fossil to electric (in driving, electricity production and car production), to really clean cars and we seem right in time, a year or so before 2050 at the target. A sort of "saved by the bell". But this is unfortunately not the reality. The CE , Centrum voor Energiebesparing published their report *Klimaatbeleid voor mobiliteit op de kaart* (2016) (17) and presented the more realistic picture.

Until 2050 there is what can be called a CO2 budget that we can use. That budget is greater for plus 2 degrees target, than for plus 1, 5 degree target. When we keep in greater majorities using our not very fuel efficient fossil fuel cars to a late date, that budget is used fully long before 2050. For example, with the 2 degrees target and the Dutch government scenario, the budget is fully used in 2035.



And here the International Transport Forum, moves in (18). In its Transport Outlook 2017 it concludes that positive outcomes in the direction of the 80 % CO2 emission reduction *"are only possible through a combination of three types of measures in favour of sustainable transport: avoid (unnecessary travel), improve (efficiency of vehicles) and shift (to low-carbon modes such as public transport)"* Their medium message of improvement is accepted, the first message of avoidance is nowhere brought into practice, and the last one about shifting has its own difficulties.

Thus at this moment politicians and policy makers are not able – outside the technological fix- to define inspiring narratives on how to reach the necessary emission reduction in mobility. So here we are. Back to our core theme. It is clear that to reach the objectives of Paris, we need areas and broader physical planning that is instrumental in;

- Avoiding travel by the most CO2 emitting modes of transport
- Shifting to lower carbon modes



#### So what are the most CO2 emitting modes? Here is the picture (19);

Driving alone in a fossil fuel car is 2,5 times as much damaging as driving in an electric car. But sitting with 3 persons in a fossil fuel car seems less damaging than driving alone in an electric car. And taking public transport is far less damaging than taking the car.

The direction is clear. More persons per car, a shift to public transport, changing from fossil to electric, and avoiding travel. But what really happens;

- still the creation of employment at highway locations,
- tight budgets on rural public transport,
- and accepting that Vinex neighbourhoods have on average the greatest car densities of all neighbourhoods in the Netherlands, which the exception of villa villages such as Bloemendaal or Blaricum.

So; time for a change, and for me the direction is clear. But first I would like go back to a question that remains...

#### Where were you?



Dear planologen. I presented the most influential forces on physical planning in the last three decades. But was it studied, was it debated, were new insights created, and were counter narratives built?

We have four centres for social sciences related Planologie in the Netherlands. And we have a number of key players.

Starting in Amsterdam. Here the sensibility for these problems can be seen. Luca Bertolini shows each and all the time his inclination towards the problems mentioned, and so does his team. Hope you are familiar with the Amsterdam paper "Adapting spatial conditions to reduce car dependency etc." (20), looking at South Limburg. The conclusion is rather problematic; rural areas are increasingly becoming completely car dependent, suburban areas (with 65-75 % of the population) are offering travel choices, but are increasingly becoming more car dependent in relation to jobs, and only central urban areas (15-20% of the population) are offering travel choices. So with only 33 year to go, we are still moving in the wrong direction.

We move to the planologen in Nijmegen. There I also see the sensibility. I already mentioned Karel Martens, constantly busy getting accessibility in its proper meaning on the agenda. But also Vincent Marcheau with his adaptive planning needs attention (21). So the East – West axis stands firm.

But how is the situation along the North- South Axis Utrecht- Groningen? Here I see less sensibility on the issue. And quite frankly, I do not know why. In Utrecht I note a rather process- oriented approach. It looks like content has been lost. And in this city I see Gert de Roo at a high and interesting conceptual level working on planning and planning theory in complex societies. But, this is certainly my bias as a human geographer, I will always relate my conceptual work on what I can see on the field, in the landscape, in cities. And for me the actual debate is on; *"how to create working and housing landscapes that produce sustainable mobility, instead of the produced landscapes of the last decades that created ever growing car dependence*?

Ladies and Gentlemen,

I arrive at my conclusion. With the neo- liberal ideology car dependent housing areas, car dependent employment areas and transport marginalisation in rural lands have been created, and may I say; "not in a small way". And it is clear that we cannot keep producing these types of areas, at least not when we would still like to reach the global warming- objectives. So; time for paradigm shifts.

I will offer you four shifts. A generic one, and three related to our study areas.

On the generic level, the debate on the under – usage of cars should start. Driving together is an important solution, and real time information apps could help. A pity for all the people that love to have a sparse free moments in their lives alone in their cars. But a great possibility to move toward real community instead of community light. Let the sharing of experiences in car travel come in! It is also good for fighting global warming and can diminish congestion.

My solution for highway locations is just clean – up, or in round Dutch; *sanering*. This would not be all too difficult as most buildings on these locations are only build for short timeframes. This building of highway locations was a mistake, a mistake the Germans did not make. Let's follow them, as we often follow them!

My solutions for Vinex areas brings me back to my chair at Eindhoven; the societal aspects of smart mobility. In my idea the Vinex areas are positioned for introducing Mobility as a Service.



With Mobility as a Service you subscribe to a mobility provider that offers you the best real time travel options. You do not have to own a car yourselves, but in the chain of travel modes, related to other modes and creating a seamless chain, sometimes car travel is the best approach. And seeing whether Mobility as a Service can work in Vinex areas is more challenging than introducing it only in the high density city centres where the already convinced are living.

And my solution for the rural area is the most challenging. A right on mobility for all citizens should be introduced, a right on decent mobility, just as there are rights on decent health care, education or housing.

When we want to reach anti global warming- objectives we should stop to build highway location and to transport mostly air in single occupant cars. In some years from now we consider that probably just as stupid as smoking in public spaces.

Thank you for your attention.

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Veel werkgevers verwachten van hun werknemers dat ze steeds daar aanwezig kunnen zijn waar klanten zijn en winsten gemaakt kunnen worden. Nogal eens betekent dit dat verplaatsingen wel met de auto moeten plaatsvinden. Je ziet dan ook dat bij bedrijven en in de wereld van consultants het gebruik van de auto nagenoeg alomtegenwoordig is. Over die verschijnsel heb ik op een miniconferentie in de Brainportregio een verhaal mogen houden. Dat vormt een verbinding tussen de snelweglocaties en de opwaartse druk van werkgevers.



# Korte inleiding voor BrainPort sessie, 25 oktober 2019

Prof. Dr. Hans Jeekel, Eindhoven University of Technology



een auto, begin 2015 waren dat er 283.

Interessant is dat in de regio Eindhoven nagenoeg alle echt belangrijke werkgevers langs de snelwegen gesitueerd zijn zie de zwarte stippen)., Deze werkgevers verwachten dat ook hun jonge professionals wel met de auto naar hun werk gaan komen. Nagenoeg alle brainportlocaties zijn snelweglocaties – Ekkersrijt,Science Park, Mediacal Systems, Acht, Fly Forum, De Hurk, De Run, High Tech Campus

Uitzonderingen; Strijp S, DAF, TU Eindhoven

Bijna alle snelweglocaties kennen slecht tot matig OV en station Eindhoven ligt verkeerd ten opzicht meeste werklocaties.

Maar er is wel iets aan de hand;

Jongeren hebben tegenwoordig minder vaak een auto dan tien jaar geleden (CBS, 2017a).
Begin 2005 hadden 313 van de 1000 jongeren

• Ook in veel andere ontwikkelde landen is het auto-en rijbewijsbezit onder jongvolwassenen afgenomen. In Duitsland neemt het autobezit onder jongvolwassenen af sinds de eeuwwisseling. Het aandeel rijbewijsbezitters onder jongvolwassenen neemt af in Noorwegen, Zweden, Groot-Brittannië, en de Verenigde Staten

Hogeropgeleide jongeren hebben minder autobezit dan lager opgeleide jongeren.

Redenen;

- Duur! ; auto voor alleenstanden duurder dan OV (grens bij 1,91 lid huishoudens, KiM)
- Sparen; zie huizenprijzen voor starters
- Duurzaamheid; vooral voor de hoger opgeleiden
- Rijden is onpraktisch; je kunt niet werken en appen

Wat doen werkgevers met deze informatie? Meestal weinig tot niets. Het ontgaat ze grotendeels.

Kortom; grote mismatch met huidige mobiliteitsvoorkeuren Jonge mensen.

Naar mijn idee wordt het van groot belang dat werkgevers hun verantwoordelijkheid hier gaan herdefinieren. Je ziet dat dit in de Coronatijd – deels noodgedwongen- wel op gang begint te komen.

Over **tijd en tijdstress** is nog meer te melden. Bijgaand een paper voor de World Conference on Transport Research , 2013, Rio de Janeiro.

# TIME, TIME SCARCITY AND CAR MOBILITY, 2013

## ABSTRACT

The relationship between time and car mobility in modern western societies is interesting and problematic at the same time. In this paper this relationship is central. A first focus is on time, time use and the characteristics of modern societies. From this focus we look at the relationship between time use and aspects of car use. The car can be seen as a great helper in situations with time pressure and time scarcity. As modern societies develop more time pressures are created, especially in single, full time working households and in families with younger children, and car use becomes necessary. The relationship between time and the car is being enforced and accelerates. Questions around time, time scarcities and reliance on cars are mostly framed as individual questions. However, a great part of this "time use – car use complex" originates from decisions and attitudes of governments and employers.

A second focus is on different types of households. Which households are time scarce, and seem to need cars as helpers? Which households are time rich? And how do time scarce households without cars find their ways?

In the last part we put the results of this literature study into perspective. Although there are problematic sides to an accelerating "time use – car use complex" many households seem to like time scarcity. This paper ends with a road ahead on time, time scarcity and car mobility, a road towards more sustainable patterns of modern life.

## TIME AND THE CHARACTERISTICS OF MODERN SOCIETIES

Time is often seen as something of individuals, as belonging to the private spheres. It is questionable whether this is completely correct. A short overview on characteristics of modern societies to time and time use will clarify.

In modern societies high standards of flexibility, in work, in leisure, in arrangements are taken for granted. Everything has changed recently, everything will change again soon, and you are expected to be able to adapt easily to ever new circumstances and arrangements.

Individuals and households that miss a certain level of "adaptation power" can face problems. Sennett describes in *The Corrosion of Character* (1998) how people in their working life have now to behave more flexible than ever. That seems to be a necessity in the New Capitalism, globally organized and aiming at short - term time profits, related to shareholders value. New Capitalism asks for adjustment to new situations all the time, to intense flexibility. Stable institutions and practices are barriers in this new economic order.

People see companies come and go, see mergers with efficiency cuts, meaning loss of employment and feel that "the economy" is the hidden force shaping their lives. The urge for flexibility sometimes creates anxiety and restlessness, as Bauman (2016) explains in his work.

An important driving force related to this growing importance of flexibility is the geographical process of spreading out of activities and services. Activities, and services, once situated in their vicinity have now moved to specific locations. On these locations more flexibility can be found, in terms of space, in terms of regulations. Modernization has created separate spaces, separate locations for several functions. We now have industrial areas, office areas, shopping malls, and housing areas without much other activity. Proximity is no longer necessary. Geographers have analyzed these processes from all perspectives. To use these services, to realize these activities, households now have to travel over longer distances.

Societies in the western world have also grown into task combining societies (SCP,2006). In one day, you have to be active in different spheres of life, each with their own schedules and organizational arrangements and their own specific time frames (e.g., the combination of opening and closing hours). You work, you escort your children, you go to hobbies, you give medical aid, and you have to do the daily shopping. And you have to do it all at the same day, on which also the plumber will visit you to do a small repair, but he is not able to say exactly when he will arrive. Planning and scheduling life has become normal. Task combining in a spread- out society means that within set timeframes longer distances have to be crossed. Daily life has become more complex and restless.

An extra element is that with growing prosperity many households in modern societies feel they have more options to choose, resulting for example in not using the nearest service (school, shop, plumber) but the one that is the best fit in their eyes (van den Brink,2005). For example, in a village in the Netherlands more than 40 % of the parents did not choose the nearest school for their children (Gerritsen and Jeekel,2010). This also means travelling longer distances.

An extra word about the timeframes. In most European countries many shops, services, and government activities still follow a nine to six- pattern, meaning that people with full time jobs will find these services closed when they are free. Knulst, a researcher of the Dutch Social Research Institute (SCP) noticed already in 1984; "persons with a normal fulltime job have a chance of 10 to 15 % to find a service open" (Knulst,1984,5). Since 1984 something has changed – for example we now have Internet- services - but in 2010 this same Institute concluded (SCP,2010,110); 'the situation where more hours are being worked, while the opening hours of services have not changed significantly leads to the suspicion that the possibility finding a service open probably has diminished". This leads to complex time schedules, and feelings of time pressure.

#### TIME AND CAR USE IN MODERN SOCIETIES

Task combining in tight timeframes and over longer distances than in the past asks for great flexibility. Many activities are combined in chain trips. Households need a transport mode that creates the opportunity to reach different activities at different locations in tight time slots. The car seems to be the only transport mode that fits. Cars can organize the traffic between the different networks modern households are active in.

Many people feel nowadays they are not free in using the car or not (are "driven to drive", see Soron,2009). Many practices, that are normally seen as belonging to modern life, like having a whole spectrum of different experiences, working at a distance from your home, and keeping friends in a vaster area, are more difficult without a car. As the German researcher Rammler states ; "The car grows into "…ein Grundausstattung eines volwertigen Gesellschaftsmitglied" (Rammler,2003,5,"*the car grows to a basic element for full and able membership of modern society*").

Adams (2005) concluded that our societies are hypermobile in style and attitude. He considers this a problem, as does Sager (2005). But hypermobility can also be framed in a more neutral way. Schokker and Peters(2006) focus on hypermobility from a completely different angle than Adams and Sager. In Hypermobielen they look at what hypermobilists are actually doing. Hypermobility for them is an expression of hypermodernism, and that is just modernism to its utmost consequences. They see a ;"...strong individualistic life style coming up in a global functioning economy". With that life comes : '...an increase to the "now", the "moment", experiencing "real time" and no acceptance of delays or postponement whatsoever (Lipovetsky)" (Schokker and Peters, 2006, 6).

Time management in such a society is, for every individual, a personal task. As the car is available, expectations regarding time management and combining activities are rising. Friends expect you to be able to combine activities and work within tight time schedules because you have a flexible tool, able to solve mobility puzzles. "Hypermobiles" are , - being helped by mobile apparatus, not only the car but also mobile phones, blackberry's etc -, experienced in solving these puzzles in a perpetual search for the cleverest routes. Obviously these "hypermobiles" consider themselves car dependent!

There is unrest created by pattern of normal modern life. Especially in households with younger children, but also in single households subjective time pressure can be felt. In the Netherlands data on these issues are available. The national Social Research Institute SCP asked respondents how many times during a week they felt hurried. The average was three times a week (SCP,2006,24 and table 2.6, for data from Flanders ; see Moens,2004) ; "the difficulty to keep standard dinner times, school times, work times, is not shown in the time schedule, but via feelings of hurriedness" (SCP, 2006,25).

In a comprehensive report on time use (SCP,2010 ; Tijd op Orde) it was concluded that 60 % of the women and 52 % of the men felt time pressure. 57 % of the women and half of the men felt hurried more times per week. Women feel more often hurried than men. Women have in most households the mental care of that household. When children fall ill, need new clothes, the related tasks are for the women. The same holds for escorting.

Hurriedness is most noticed between ages 30 and 50. And task combiners are more hurried (SCP,2006,26). This is explained in Tijd op Orde (SCP,2010,42) ; " Being active in more domains of life, means not only having to cope with different activities, but also with different expectations and different duties and appointments in the different domains, meaning one has to change gear all the time"

Escorting is now the fastest growing activity in the mobility field. Escorting means driving people, often children or the elderly, to clubs, friends, hospitals. We have figures for Switzerland; in 2005 94 per cent of escorting was done by car, and women between 30 and 50 years of age dominated in this motive. For the Netherlands it looks like some 15 per cent of the journeys made by women of these ages are for escorting (MON 2009,8.11 category overig). In the British Travel Survey 2006 is stated ; "while younger women make more escort trips than younger men, men aged 50 and over made more

escort trips than women in the same age group." Including both escort education trips and other escort trips, women aged 30-39 made over 25 per cent of their trips escorting someone else. And in Germany, for parents with children under 6 years escorting is 26 % of their trips, slowing down to 12 % when children are above 6 years.

From these data the picture arises that escorting is an important motive ; somewhat like 11 per cent in journeys and 8 per cent in distance, with a peak for women between 30 and 50 years of age with children, where escorting accounts for 25 per cent or more of their journeys. Escorting is very car dependent ; it looks like more than 80 per cent of the distance for escorting is travelled by car, making escorting one of most car -oriented motives. The second highest mode for escorting is walking, and not public transport. Public transport has no role in escorting.

#### THE CAR AS A HELPER

The car is the central helper in realizing expected and promised activities in the scarce time available. This is clarified in a number of publications that bring real life into academia. In *Rushing Around: coordination, mobility and inequality* (2002b) Shove analyses what is necessary to allow the social practices now defined as normal in our societies take place.

She defines a practice as: a routine like way in which people travel, use products, in which developments are framed, and in which the world is understood. Mobility systems facilitate all the practices that can take place, but mobility systems do also change these practices. The task for mobility changes through time "...mobility is not about getting from A to B... but instead about integrating everyday life and the activities required of "normal" practice. And: "...people are rushing around in order to preserve the sense that they are behaving in normal and ordinary ways" (Shove,2002,9).

This deals with "spacing and timing", planning and organizing of different activities and practices in space and time. Each human being in our time and society has to follow his or her own spacing and timing – program. In Shove's view the car is the best equipped to help with this `rushing around`. Exclusion can be a problem for people obliged to participation to these practices without the possession of individual and collective instruments to follow the aforementioned difficult and tight time schedules. Shove concludes that a more collective programmed society will create less social exclusion, and she asks what in our time is considered to be ``an effective membership of our `normal` society `.

Craig (2005) signals in *How do they do it? A time- diary analysis of how working mothers find time for their kids*, that full-time or nearly full- time working mothers with children in full day nurseries spend almost the same amount of time with their children than other mothers. The car is necessary to make this possible. A view arises ; "women rushing from work to pick up their children from day care, cooking, bathing and feeding and talking to and playing with and reading to their children, and cuddling them to sleep, before dropping exhausted into bed themselves and beginning it all again the next day "(Craig, 2005, 16).

Southerton presents in *Sqeezing Time*; *Allocation practices, coordinating networks and scheduling society* (2003) a study on hurriedness. He interviewed 20 households in a suburb of Bristol. All respondents feel sometimes, and a few very often, hurried and nervous. The need to have a dual, or at least an one -and- a half income in order to be able to live what is considered a normal middle class life in our modern societies leads to less time for daily household activities. Whether hurriedness existed "depended on individual capacities to schedule their practices in line with the shared sociotemporal constraints found in their contexts of network interaction" (Southerton, 2003,17).

Hurriedness depends on context. When a few of the planned activities are not taking place as scheduled a relaxed morning can easily change into a hurried day. From his interviews Southerton concluded that hurriedness is increasing. There are cultural differences in the moments of time pressure. In *Famille et temps: Etat de l'art et tour d'horizon des innovations* (2002) the Swiss researchers Kaufmann and Flamm presented a European perspective on this theme. Looking at organizing life with children they see three models.

The first is the traditional model ; women stay in majority home to take care of the children. This is the case in Italy, Greece, Spain and Ireland. On the other end of the spectrum are countries where most women work more or less full time. This means leaving their kids the whole day in controlled environments. This is the case in France, and mostly in Scandinavia. The third group is an intermediate group. Women mostly work part time, and children are part of the time raised within the family as in Italy etc. This is more or less the situation in Great Britain, in Germany, in Austria en certainly in the Netherlands.

Countries supply different arrangements. The authors show that for example in France part- time childcare is mostly not available. The three models have direct consequences for car mobility. The relatively relaxed situation in Italy etc. has in the intermediate countries -combining work and child care on the same day- become a rushing around pattern. In the countries with full employment for women the stress is concentrated on the two moments of leave and pick up. Time in the car becomes quality time ; for women that work all day, the journeys with their children are seen as a way to have privileged contacts with their children .

#### AN ACCELERATING AND RE- ENFORCING PATTERN

In Western European countries mostly 80 % of all households own at least one car (Jeekel,2011, 201). 20 % of all households are carless: singles, poorer households, ethnic minorities, single parent families, elderly women. Employers and governments more or less expect households to be car- owning. New locations, often related to highways, are developed with car use in mind.

Car use offers room for new and broader choices. Growing prosperity gives rise to growing expectations (van den Brink,2004). Dissatisfaction arises when modern living conditions cannot meet the standards related to these growing expectations. Partners expect more from their relationships than ever, the burden of affective problems is growing. In the work sphere demands from employers towards employees are growing, and employees have higher expectations of their careers. It is rather difficult to meet these higher expectations, so ; a price is paid for all these higher demands (Van den Brink,2004,20): more divorces, more stress. Women in particular have to combine activities in different domains, in rather tight timeframes; "...the housewife – spending a great deal of her time in and around the house, and being able to follow her own time schedule - knew margins. These margins disappeared, and the former housewives' tasks are being spread over more, and more busy people, thus creating stress in society."(Van den Brink,2004,26).

Van den Brink defines a process of growing expectations. Norms and standards for social interaction rise. We become more sensitive to inconvenience, to nuisance, and to risks. And we have higher, mostly implicit, demands on interaction. Dissatisfaction is growing, but there is no single body able to coerce these higher standards. Modern society creates higher norms for living together, but most citizens also accept that these norms will probably not be met.

Cars are mostly faster than other transport modes. But extra speed to overcome distance is not used to diminish time pressures. It is often "consumed" through shortening the time periods between the activities, allowing car divers to carry out more activities in the same time frame. Greater flexibility

leads to greater flexibility. To cite the Dutch philosopher Achterhuis : "people buy time with speed, and this process continues and continues' (Achterhuis, 1998). In this circumstance stress and time pressure are to stay.

#### TIME AND TIME SCARCITY IN A BROADER SOCIETAL CONTEXT

Time, time scarcity and stress are in our societies framed as individual questions. The dominant vision is that individual households create time stress themselves, with their choices, and are seen as responsible for their own solutions. One of their solutions is a use of the car for smaller trips, which leads to environmental damage, to traffic safety problems and to loss of playgrounds for children.

It is however questionable whether the framing of time issues as individual generated problems is appropriate. We already noticed the interrelation of time use and societal characteristics and arrangements. Beck (2001) marks his position very clearly stating on this issue ; "each of us is expected to seek biographical solutions to socially produced troubles".

In *City time: managing the infrastructure of everyday life* (2004) Jarvis focuses on the political and societal context of time scarcity and hurriedness. She too argues that time scarcity is too often framed as an individual problem, as an individual question. But time scarcity also has power elements and inequalities. Richer households can more easily mitigate time scarcity than poorer households. And responsibilities for service providing previously taken by governments are now, in the neo- liberal climate, laid on households. Take for example waste; municipalities formerly came to pick up your bigger waste. Now households are expected to deliver increasing amounts of waste themselves at the dumps. But one can, in the eyes of Jarvis, also think of home care, volunteer aid, or too little capacity in day nurseries. Jarvis also sees the restrictions created by opening hours regimes. Much coordination is needed within households. Part of the time scarcity is a result of government decisions. She asks for a good theory on daily coordination. And she finishes ; "...do we care sufficiently about the consequence of escalating inequality, congestion, pollution and uneven development, to invest in public solutions to private coordination problems, when these threaten social cohesion and environmental sustainability?" (Jarvis, 2004, 14)

Also, the observation should be made, taking some Dutch examples, that politicians expect modern households to have no time scarcity, when they decide on government budget cuts and their approach. For example, budget cuts on child nurseries are motivated by leading politicians from the vision that these nurseries are overused, and that parents have to take care more of the children themselves. Budget cuts on psychiatry are explained by stating that families have a greater role to play in helping psychiatric patients. Budget cuts on care are motivated by arguing that more medical aid by relatives would be appropriate. On the other side, these same leading politicians want to see less part time work and more full timers, otherwise our European societies cannot keep up with the new economic players in the world. It remains rather unclear which coherent and integral vision on time, time scarcity, work load and combining activities is here at stake ! It looks like modern households have to do more other activities, and also to work more!

Also interesting is the position of employers. The often- announced revolution in work, coming from more homework, and arrangements of new working styles starts slowly. Teleworking and working at home can be seen as alternatives to car travelling. But how important is teleworking ? We have figures for three countries. These are unfortunately rather old figures- newer figures cannot be found. In the United Kingdom in 2006 3 per cent of those who were employed always worked from home, and a further 5 per cent did so at least one day per week (National Travel Survey, 2006, 49). For another 10 per cent of the employees it was possible to work from home. In the Netherlands in 2003 between 3

and 22 per cent of the employees worked from home with some regularity (more than once in two weeks), on average 6 per cent (SCP,2003,89 -114). Higher education and work in the public sector are indicators for working at home/ teleworking. In Sweden in 2005 1 per cent of those in employment teleworked, while 21 per cent of the employed stated they had work tasks appropriate for teleworking (41). From these data a picture arises ; more than one fifth of the employed population can telework relatively easy ,half of this group actually works at home sometimes, and half of this last group (4-8 %) work regularly at home.

Next to the fact that teleworking is not possible for many jobs (e.g. school teachers, health care, builders) an important reason for the rather low results is in the behavior of the employers. Three probable explanations can be offered ; habit, the wish to meet in person, and active resistance by employers.

To start with the last explanation. When their employees work at home employers are not able to control whether they are working. Working at home is seen as problematic by many employers, especially by operational managers. Although the management literature sometimes suggests otherwise, the basic management style in offices and factories is still" command and control", especially at the lower management levels. With their employees working at home, managers have to steer on results, on content, and not on behavior in the office. Many managers seem not able to steer that way, are not used to manage professionals. The Dutch IT consulting firm Cap Gemini (2009) describes this in greater detail. Although it should not matter what employees do all day - when they achieve the agreed results and are available to talk to and mail with colleagues, that should be enough - this new working structure is blocked by old fashioned control thinking.

The wish to meet face- to- face plays a role in difficult decisions, and in shopping and leisure. Virtual meeting remains something other than actual meeting, and habit remains an important explanation, especially for the generation over 30, who did not grow up with IT. Many IT possibilities seem to be used in practice for the first time when employers see physical mobility to work no longer as obvious, and start considering organizing work in a "mobility poor"- way (Cap Gemini,2009,25).

Possibly we will arrive at a tipping point (Gladwell ,2000), when the first generation that grew up with IT reaches adulthood, and starts driving. For this generation the complete use of the IT- spectrum is obvious. This generation created virtual networks, and lives in them. But until this generation dominates the labor markets we still have to wait, and to see advancements, but rather slow advancements in substituting car use by working home.

Last element to be presented is the relation to sustainability. The complex of time scheduling, need for coordination, time scarcity, hurriedness and stress does not look very sustainable. Searching for more sustainable life styles seems rather far away in this general pattern in the western developed countries (SCP,2004). Our modern risk societies are characterized by a battle around time. As long as this battle is not made explicit, and not fought, feelings of time pressure, hurriedness and stress will probably grow. The development of a policy on time, with the aim to diminish psychical fatigue and stress, can be useful.

#### TIME SCARCE AND TIME RICH PEOPLE

As stated earlier time pressure and time scarcity is mostly an issue in families with younger children and with singles who work full- time. Time scarcity is less an issue with couples without children, with singles working part – time, with families with grown- up children, and with the elderly. To take this further ; many households are even time rich. It is interesting to note how many people can spend their afternoons at sidewalk cafes!

In the time rich populations a difference could be noted. There are richer time rich households and poorer time rich households. The first group is mostly involved in many leisure activities, and are the great holiday spenders. The second group can be involuntary time rich. Quantifying the groups with some "rules of thumb" offers a clearer perspective. In most Western European countries full families now take up 28 % of all households (Jeekel,2011,198). Nearly half of them will have younger children (until age 12). Singles account for 35 % of all households. It is estimated that half of them will work full – time. And 6 % of all households consists of single parent families, with the estimation that half of them will have children in ages below 12. Some 35 % of the households can thus be seen as time scarce households.

On the other side we have some 12 % elderly households (singles and couples), and at least 10 % families that can be seen as having no time scarcities. Probably, at least 25 % of the households can be seen as time rich. 40 % of all households are probably intermediate between time rich and time scarce. In our societies time- rich people and time scarce people can live near to each other. Where a time rich individual has all the time in the world, has his hobbies, is busy developing himself, taking leisure, or is simply bored by all the time in front of him, his neighbor is rushing around and does not know how to combine all different tasks and expectations. In some neighborhoods the time- rich dominate, for example in service apartment blocks, while in others the time scarce dominate, for example in the time- rich and the time -scarce households. A new dichotomy is starting to develop. Within the time -rich there is also this other dichotomy ; the richer time- rich households have a far greater geographical area in which they live and create their experiences, than the poorer time -rich households.

The car use of the different groups differs. Richer time- rich households are mostly great car users, using their cars for shopping, visiting friends and leisure. These households avoid congestion locations and congestion times. Poorer time -rich households, and especially the lower educated among them, have a smaller action radius. Barriers and difficulties dominate their approaches (Morris, 2006). Morris describes *"travel horizons"*, to be seen as:; the distance or the location that people are able to travel. For most lower educated people this distance is small. This is a function of knowledge, familiarity, trust, and fear of interchanges. Unfamiliarity leads to staying nearer to home. With their smaller travel horizons many people with lower incomes or without cars need to use services and facilities nearer to their homes.

#### TIME SCARCITY AND THE CARLESS HOUSEHOLDS

How do carless households cope with problems of time scarcity? Not being able to use a car leads probably to some impossibility to realize all activities in the set time frames. There are at least two exceptions ; the first has to do with budgets. When carless households have a rather high budgets they can pay for taxis. And the second is related to specific locations. It is clear that in the major western cities, car use does not offer the advantages of speed and flexibility. Households know this ; in the three city Lander of Germany (Hamburg, Bremen and Berlin) only in average 42 % of all trips are made by car, compared to a national German average of 58 %. And in Paris only 12 % of all trips are made by car.

In general, carless households can face problems in realizing all necessary activities, unless they are "time-rich". But is this the situation? Looking at their characteristics carless households will in majority probably be more time rich than average. On the other hand, around 40 % of the carless households hold jobs. As we know there are only few carless full families. Thus, most carless households facing time scarcity will be single households, but there will be some carless and working full families, and

more single parent families. We know very little about their situation, and about how they combine tasks and activities in set timeframes without a car. Theoretically four possibilities are available. The first is to move to cities. Here there is no or no great disadvantage. The second is to reduce the spectrum of choices ; some possibilities are not to be realized by carless households. They just do not go to the forest for just an hour, or they choose locations that are within bicycle reach. Third possibility is to ask for lifts. We know from literature (Davey,2004, RAC Foundation,2009) that members of non – car households have some reluctance to ask for lifts. In The Car in British Society (RAC Foundation,2009,82) is stated ; *"some people who did not own cars...felt that they were a burden on their friends and families"*. And a fourth possibility is the move forward, the creative carless elite showing that time scarcity can be fought with creativity, with solutions that make car drivers smile!

An estimated 30 % of carless households with time scarcity will probably have some real accessibility problems. For example, it is difficult to reach highway locations without cars, it is difficult to reach hospitals late in the evenings. In most national policies on car mobility only minor attention is given to this type of accessibility problems.

#### MODERN AMBIVALENCE AROUND TIME

The problems mentioned in the previous chapters have to be seen in perspective. Sometimes people love their time scarcity. Part of the time scarcity has to do with the moral climate, and with status elements ; you attain a higher status by explaining that you are very busy.

And the Norwegian researcher Hjorthol (2005,7) states ; ""…not only is time pressure normal, it is also socially acceptable and to a degree status- giving….time pressure becomes "a contemporary myth. Mobility, and especially hypermobility, gives many citizens the idea that mobility is without boundaries. "Everything that can be done, should be done", could be a motto in modern western risk societies. More people than ever will probably define their lives as a chain of events, spontaneous or self - created.

There are also many expectations; being mobile is such a customary practice, that you are expected to drive to locations 100 km away the same evening for a joint activity. As we see a societal discourse on well- considered food, there is no start to define well- considered – ethical, thoughtful and responsible - mobility. With mobility, everything is taken for granted. Although there are now books on ethics and mobility (Bergman and Sager, 2008, van Wee, 2012) it often looks as if the relationship between ethics and mobility still has to be invented!

#### THE ROAD AHEAD ON TIME, TIME SCARCITY AND CAR MOBILITY

The car facilitates the rushing around of modern households. Combining tasks in tight timeframes can be done via car use. Households temporarily without a car can feel awkward. But this rushing around also leads to high CO2 emissions, to stress, to loss of latitude, and to loss of relaxation. This relaxation comes back with a switch- over to a time- rich existence.

Politicians, economists and other decision makers have been successful in framing questions on time and stress as individual problems, arising from maladjustments of specific households to the demands of modern societies. There is hardly any discussion on the responsibilities of decision makers in our societies for time problems with which families and single households are confronted.

The first step on the road ahead is to analyze which choices and attitudes of governments and employers lead to time problems for households. To name a few ; the need to be physical present at work, choices in diminishing government services, budget cuts that ask for extra time to be spend by

households, and keeping conservative opening and closing hours. All elements that can be arranged otherwise.

The second step is raising the awareness that we have with time problems and time scarcity a rather great societal problem at stake. Stress, burn out, do cost our societies money, in terms of real money and in terms of human resources. The battle around time is fought individually. The time is ripe for a *"time movement*", starting to discuss the rushing around collectively.

The third step is to create answers to the permanent raising of flexibility standards. We should not bring all human relations under the pressure of permanent higher efficiency and flexibility. There are values higher priced than flexibility. A moving towards more relaxation, and more solidarity between the time rich and the time scarce would be more sustainable and wiser.

And the last step is to make a start with discussing ethical questions in the area of mobility. Food is now discussed from ethical perspectives. Mobility is still a "free for all" area. We need to discuss how well- balanced and well- considered mobility could look like!

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# **ANXIETY AS A DRIVING FORCE FOR CAR MOBILITY, 2013**

## 1. Introduction

Anxiety is a driving force not often heard when people are being asked to motivate their frequent car use. Most heard argument is convenience, followed by freedom and habit (Jeekel, 2013, 93). Anxiety, or even the specific help the car can offer, protection, is not mentioned. In this article reasons for this circumstance are analysed.

Cars can be instruments to diminish feelings of anxiety in modern life. This role of cars and car driving is probably a very important role, looking at the importance of "*health and safety*", or "*anxiety, fear and insecurity*"- issues in modern political discourses and in modern life (Durodie,2006, Furedi,2002, Minton,2009) The focus will be to analyse why and in which specific situations cars can be a help for anxious households. And the scope will be on four situations:

- Anxiety and time ; people are in modern life, with all its time scheduling, anxious on being too late, and being thus not able to fulfill expectations

- Anxiety and space ; many people feel anxious and vulnerable in public spaces.

- Anxiety and the young ; parents feel in modern life anxious about the circumstances for their children

- Anxiety and the old ; elderly feel in modern life anxious and vulnerable in using public transport and even in using other modes

## 2. Anxiety and insecurity in modern risk societies

Beck defines our western societies as risk societies. In his discourse three elements are central: risk, individualization and modernity (Beck,1992). The production of welfare in modern society is systematically combined with the production of societal risks. The logic of the distribution of wealth, that always defined society, is changed in the logic of the distribution of risks. A risk society produces at the same time anxiety and insecurity, and expectations and chances. The equilibrium between these four elements seems crucial.

The greater individual freedom, the richer variety, and the loss of standard behaviors causes at a societal level the disappearance of a sense of direction. At the personal level feelings of anxiety and insecurity could arise. To quote Boutellier ; "In a risk culture moral discomfort generates a need for safety" (Boutellier,2002). A more fluid lifestyle is created, with a loss of long standing orientation marks. Boutellier again ; "our culture is not a culture of learning and knowledge accumulation, but of discontinuity, of forgetting, and starting all over again. "(Boutellier, 2006,38).

A study from the SCP (the Netherlands Institute for Social Research, 2006) noted that 15 per cent of the Dutch adult population feels more or less unsafe. Feelings of insecurity are highest at night, outside the known living spaces, in areas where many non-Dutch citizens live, and in neighbourhoods that look corrupt.

Where can we situate the reasons for these perceptions of insecurity, which are certainly not matched by the criminality statistics, at least not in the Netherlands? A first explanation offered is the focus in the media (see Altheide,2002). In most western countries journalists report with great frequency about the most risky and violent incidents, and they report about the same incidents several times.

Durodie, the former director of the British International Centre for Security Analysis, offers a more elaborate vision. He criticizes the start of discussions about anxiety, risks, insecurity and safety. The focus is in his vision on managing and mitigating risks and far less on the use of our human capacities to organise our lives in a more controlled way; ""to take a risk" has become "to be at risk" (Durodie,2005,14). Modern societies are very defensive about risks; "we do not have a risk society but a risk perception society" (Durodie,2006,2).

Durodie's approach focuses on the term "resilience". Resilience has been lost. In Durodie's opinion ; "key element in shaping our perceptions of risk and the management of most policy issues today is a sense of isolation and insecurity that affects every layer of society" (Durodie,2005,16). People living in each others proximity do not know each other, are socially not interrelated. Durodie expects resilience to grow when we know better - in connection with our fellow human beings - what to strive for, who we want to be, and what we are aiming at.

Locke (1998) heads in the same direction. His central thesis is that the price paid for greater freedom of movement for modern man has been a growing anonymity in the social spheres. Small isolated private introspection leads to framing everything unknown and social as a potential or actual risk.

Durodie finally argues that the best approach to risk management is to restore the connections with our fellow human beings. Competent risk management needs trust, and we have lost too much our trust in our fellow human beings. A sort of "infrastructure of threats" (the term used by Beland, 2005) seems to have developed

#### 3. Explaining the actual situation on anxiety, risk and fear.

Why has this situation arisen, especially in societies that as a majority can be classified as societies with rather low statistics on criminality? An explanation can be offered by focussing on an example, the sphere of risk and vulnerability related to children.

There is a rich literature on this subject. Seven explanations that are interlinked, will be presented for this sphere of risk. The first is very near to the parents. As families in history were rather extensive, we have moved in recent times to small families, with mostly one or two children. These children are seen as "*precious jewels*". Children get more attention, especially in higher and middle classes (Lareau, 2002). Children are seen by their parents as increasingly valuable and vulnerable, and need to get much protection, it seems. To state Thomson (2009,7); "*Children in the past are assumed to have capabilities that we now rarely can think they have… so fixated are we on going to give our children a long and happy childhood that we downplay their abilities and their resilience*".

The second is the substantial growth of danger awareness. Thanks to the media and thanks to former victims we now know far more than in the past on child abuse, incest, the misuse of children by authorities. We are more aware on what could possibly happen.

The third explanation has to do with the way our modern societies are arranged. Modern households need to be flexible. Most households are flexible and mobile by cars, so traffic has become far denser and more difficult to read than in the past (Jeekel,2011,2013). Modern households also need rather extensive net household budgets to be able to live what we now see as normal, active and rewarding lives. This means often that in families both partners need to earn an income, thus leaving their living

neighborhoods rather empty during work hours. Children are thus faced jointly with more difficult traffic situations and with empty houses.

A fourth explanation elaborates on the third. In our risk societies many households have no relationships with other households in their neighborhoods. Their friends and family live in other locations, which can be reached more easily than in the past. This leaves the relations to neighborhood households rather weak. For this situation the term "*community light*" has been coined (Hortulanus and Machielse, 2001). Modern households identify with their neighbours in a way characterised by a certain distance in combination with easy moving contacts. People in a neighourhood are no longer seen as able to protect children but rather seen as a threat to children's safety. With such a frame of mind modern households often feel alone in raising their kids to adulthood.

The fifth explanation is rather broad. There is, described in some detail in the work of Bauman (2001, 2006) a *generic nervousness in modern risk societies*. We consider many elements of life as risky, and are even often framing our modern lives in risk terms (Furedi, 2002). This generic nervousness offers a good climate for seeing activities of children more in terms of vulnerability and anxiety than in terms of opportunity

A sixth explanation has again some regime aspects. There has grown a definition, especially in the Anglosaxon countries on what "good parenting" seems to be (Ridgewell et.al, 2005). Good parenting is certainly not missing any opportunities for your children, and is also driving them to all locations where something happens.

And a last explanation is the extra vulnerability created by the media. Media need high listening, reading and watching results, to be able to stay in their race as companies. Media need drama, and use stories on criminality towards children over and over again, thus making households anxious on what could possibly happen (see Altheide, 2003).

The net result is that children are not as free to play and not as free to go wherever they want as they were in the past. Research states that the independent mobility of children has strongly diminished in the last decades. (Pooley,2005a and b)

Returning to explaining anxiety in society on a broader perspective the same type of explanations can be used for public spaces, time stress, and the anxiety of the elderly. Our modern western societies seem to produce as a by- product of our way of life a rather high measure of anxiety and feelings of risk.

#### 4. One level deeper ; the sources of modern anxiety

Uncertainty and unpredictability are at the core of the risk society. Many types of hazards and accidents can occur. New technologies involve complex regulation mechanisms which can not allways be adequately tested in laboratorium situations or with computer simulations (Unger, 2001, 282).

Politicians try to avoid getting blamed for hazards and accidents. Beland (2007, 322) calls this behaviour of leaders a form of "organized irresponsability", as he explains how political leaders connect to the wishes of modern households for greater safety from hazards and acccidents. Political leaders try to get credits for minor results in the sphere of for example crime fighting, but frame their overall strategies mostly on "blame avoidance". Where modern households want to feel their leadership, the political leaders put their initial responsabilities easily back to those households.

In late modern risk societies the widespread application of the precautionary principle can be noticed. Furedi (2002,4) even states; *"the evaluation of everything from the perspective of safety is a defining*
characteristic of comtemporary society". And Tudor (2003, 245) brings emotion in; "we perceive the world as dangerous and expect the worst of other human beings, lacking trust in established authority and exhibiting little or no faith in the efficacy of human intervention. In one word:; we are in a state of constant fearfullness".

This fearfulness is often operationalized by a discourse on the levels of crime in societies. In all modern societies public perceptions of the seriousness of crime problems exist relatively independent to official statistics and indepedent to the incidence and risk of victimization (IPSOS,2008). The real risk is far lower than most modern households expect. There is now strong evidence (IPSOS, 2008,5) that the media play a key role in the perception of rising crime rates and in keeping the gap between perceptions and actual figures on crime.

But is the anxiety of modern households really mostly related to crime ? This is questionable. Giddens (1991) explains in his work that modern individuals and households are left to negotiate their way trough the uncertainties of our risk societies. Their individualized world is a world of choice, of multiple options and of many possibilities. But this post- traditional world is also, and necessary, a more uncertain world, replete with dangers, hazards and accidents. With the decline of trust in others, partly related to political responses and strategies, partly related to the behavior of the media, households and individuals are left vulnerable to individualized anxieties. Most risks are put on their treshold. Risk can be seen as " a major apparatus through which individuals in a society are encouraged to engage in self-regulation" (Lupton, 14).

In Jackson's view (2004) crime and especially the discourses on crime act as a symbol; "worry about crime is wrapped up in broader social concerns, about neigborhood breakdown, as well as more diffuse anxieties about social change and the decline of moral authority in modern societies... the idea is that fear of crime emerges when people view there to be an erosion of the values that keep public behaviour in check" (Jackson and Gray, 2010, 15) Framing anxiety on life conditions primarily via crime discourses makes it relatively easy for political leaders to deny the difficulties, partly created by their own decisions (Jarvis 2004), in living decent lives in risk societies. Politicians can focus on crime rates and work on crime fighting, thus leaving modern households alone with their far broader scope of worries and anxieties.

However, also households are not accustomed to clarify their real worries. They take most living conditions of modern life, with its time stress, congestion, moral problems, and lack of trust, more or less for granted and look for forms of adaptation to circumstances that they consider unchangeable. We will look in the next paragraphs at four anxieties related to living conditions, and we will try to explain how cars are great helpers in the constant adaptation processes in risk societies.

## 5. The four situations

Where does the car fit in ? We already noticed that the high density of cars in our societies creates anxiety around traffic safety. However, in this article the focus is on car mobility in its role to overcome or mitigate anxieties in modern life.

## 5.1 Anxiety around time and car mobility

In recent years discourses on the use of time in modern risk societies have expanded. Rosa (2005 and 2012) coined the concept of the "acceleration society" (see also Wacjman, 2008). In an accelaration society most elements of life are speedening up, and it is expected that individuals can keep the speed and extra flexibilities needed.

At least two types of time can be identified (Zijderveld, 1991). There is legato, flowing time with rest points, and staccato, time in well- defined blocks. In our societies staccato time dominates. The discrete "split up time" makes efficiency possible. Every activity get its time, and individuals and households are expected to be on time. Schwanen (2012) considers time and the temporal to be central to transport and mobility. However, almost all transport researchers see time as linear. He states ; "transport researchers need to go beyond commonsense understandings of time and be more reflective about their predispositions and practices regarding time".

A part of the anxieties related on time focusses on being too late for appointments. A specific situation here is the anxiety on not being able to fulfill the networks of appointments necessary during a day. Single appointment anxiety focuses on the reliability of the moment of arrival.

In a number of circumstances (exams, meetings, hospital appointments) it is quite important to arrive at the appropriate time. The importance of being somewhere "*just in time*" has grown. Taking the car is by most individuals and households now seen as more reliable for this goal than taking public transport (Jeekel, 2013, Dobbs, 2005). However, congestion on the road can form a great problem for arriving at this appropriate time. Hence the growing importance of reliability issues in transport policy and the growing importance of on - trip and advanced travel information. It is clear that the idea that more difficulty in arriving at a location in time, compared to 20 years ago creates stress, and is framed in politics as a (dominant middle and higher class!) problem.

There is a caveat in using the car instead of public transport to diminish time stress; you, and only you, will become responsible for being somewhere on time. You cannot make a service provider, or a public transport provider, responsible. Only you are responsible for getting your children to their hobby on time, or for collecting them from the kindergarten. In modern risk societies this responsibility creates stress, because although the success of your trip depends on other drivers (think for example about congestion), there is no way to make them co - responsible for your arriving on time.

Network appointment anxiety is the anxiety of not being to fulfill all tasks in a single day, in the defined time frames. Modern households need a transport mode that gives them the ability to combine many activities (working, shopping, medical care, escorting the children) and appointments at different locations in a tight time schedule. Daily activities have to be arranged in rather tight timeframes. Opening hours, most shopping hours, hours at which technical services such as plumbers, can be assessed, school hours and working hours in most modern risk societies still follow a "nine to six"-pattern (Breedveld,1999). Many activities in a tight time frame make a system of time planning essential, with a number of "just in time"- situations. The car seems to be the only transport mode that, at least for very many households, fits into these demands.

Reaching single and networks appointments can create stress. The Dutch Social Research Institute (SCP) presented in 2004 a report on stress and stress feelings in our times. Their conclusion is ; "Our modern society is a demanding society. New possibilities are used to realize more, and not to reduce efforts and strains, thus realizing more leisure and free time. Faster mobility leads to greater travel distances, to higher productivity, to more production, the higher incomes, to higher consumption, to women emancipation, to more task combiners and to higher mortgages. "More and fast" is in our societies more important than "less and relaxed". (SCP,2004,36). The price for this choice is high ; a relative high degree of mental fatigue. But from the perspective of the SCP "this seems to be an evitable side effect of an acceleration society and an accepted and wished individualization" (SCP, 2004,36). Our existence is time- intensive and with this time – intensity comes a whole range of appointments, according to Breedveld who studies school hours, childcare and the related

responsibilities ; ""one hitch, one train too late, one meeting that ends later, or one day that children are unexpected free from school, and problems arise" (Breedveld, 1999, 22).

Cars can help in diminishing feelings of time stress and anxiety. Skinner (2003) analyzed the need for mothers to manage a number of deadlines each day. On time to school, not too early leaving work, on time back at school, on time to the hobby, on time picking up from hobby. Managing the coordination points (Skinner,2005), the moments of change to another activity is essential. Keys to successful management of deadlines are a short distance between work, school and care, flexible working hours, help from family and friends, and having disposal over fast transport.

Dobbs (2005) described some reasons why households with access to many public transport facilities still use their cars for most journeys. Public transport does not take them exactly where they have to be, and households are very critical about the inability of public transport to make chain trip patterns. Public transport seems to be stuck in a "nine to six" – society. Women are more active on the labour market when they have a car at their disposal.

The urban field has spread in the last decades. Peri- urbanization is urbanization at a relatively great distance from the central city. The term was coined in France, where people working in Paris now live in villages and small cities 100 kilometers from the center of Paris in *"la couronne francilienne"*. The peri-urbanized territories are now the fastest growing territories in France in terms of population and housing stock (Massot et Roy,2004). Newcomers are mostly higher officials and freelancers. They are very dependent on car travel to reach their workplaces, as there is mostly little public transport available.

Motte- Baumvol (2007) looked at activity and showed that car dependency was greater in villages where there are no services. But even when there are services car use is on a higher than average level than in France as a whole. These long car commutes create specific anxieties. On the one hand is the time stress of reaching work locations always on time, as there are so many chances for congestion on the long road. (Korsu et Massot, 2006). Stutzer and Frey (2004) looked at the situation in Germany, where people with long commute times are less satisfied with their lives. The authors suggest that one major reason is underestimating the capacity to adjust to longer working days. Roberts et.al (2011) noticed that the psychological health of women is adversely affected by commuting, while men's is generally not. A reason could be that woman make decision about commuting under a different set of constraints to men.

The other element of anxiety is related to the durability of the arrangement. What will happen when households budget do not make two cars longer affordable, as two cars are needed in households with those circumstances ? And what will happen when in future situations of far higher petrol prices arise ?

## 5.2 Anxiety related to space and car mobility

Modern households fear some locations and spaces. An extreme reaction to fear related to space is the "gated communities "phenomenon (Atkinson and Flint, 2004). However, most households show less extreme reactions. They try to avoid visiting those places and spaces, especially in conditions where they consider themselves vulnerable.

The public space in cities has in recent years grown into such a space. The same holds true for highway locations in evenings and at nights. And specially in countries with greater social inequalities a number of "no go – areas" are identified by many middle and higher class households.

Formerly public spaces in cities were the living areas for the whole population, for all inhabitants, a terrain and an area for meeting different lifestyles. That was not always easy, everybody, rich and poor used the same space, and subtle rules of behavior came into existence (see Sennett, 1976). Public spaces were not empty, and offered danger and chances at the same time. People could not easily withdraw from public spaces.

With growing prosperity and with the arrival of private motorized mobility the presence in public spaces did become a choice. Pernack (2005) paints a picture for Germany . Public spaces are in crisis. People do not know how to behave there. The "self" and not social codes and behavior has become the norm in society. Human beings like to feel intimacy, but public spaces cannot offer intimacy. People no longer know how to act in dialogues with fellow human beings with other orientations and lifestyles in an area that belongs to nobody. The public space is nowadays not a "rules and codes governed" area. While part of the population, the middle and higher classes, retreat from public spaces, the lower classes intensify their presence.

Highways locations have been created in the last four decades. In Europe in the last two decades many highway locations have been developed (Jeekel, 2013, 22), often with public investments. Along the highways in a great number of countries you can now visit office parks, business parks, factory parks, industrial zones and housing sites.

At evenings and at night times these locations are without people, leaving this part of the built- up area then a location without many rules. People try to avoid also these locations. For "no go areas" the same line argument as for public spaces in general can followed, however far stronger.

Cars are the big helpers in avoiding fearful spaces. The anxiety these spaces can create could be banned by the protective shield cars can offer. The car can be seen as part of a hybrid (Beckmann, 2001). On the road the driver and the car form that hybrid. For other participants in traffic the driver-car – hybrid can be seen as "a monster in a metal cocoon", a cyborg with human and non-human characteristics, a heavy and strong phenomenon. Pernack (2005,30): "*The car is the ideal transport mode for crossing the transit zone that formerly was known as public space*".

Next to this protection modern households and individuals try to diminish visits to public areas, highway locations, and no- go areas. Again Pernack (2005, 40, translated from German); "many escape routes have been created to withdraw from difficulties in public space, mental routes as well as physical routes. May people find it burdensome to react to ever changing situations with their own straightforward interventions. Many people are not so skillful in public and withdraw. Spaces and areas that are difficult to read are avoided, easily readable areas are sought" The car can help them in finding alternative for anxiety generating spaces in modern risk societies.

Concluding on anxiety related to time and space we could state that especially the need to be just on time at appointments, the necessity to follow time schedules in tight frameworks, burdensome situations of long commuting, crossing through urban public spaces, no go- areas and ( in evenings and nights ) also highways locations probably lead to "individualized diffuse anxieties" in our societies. The car is a helper in overcoming these anxieties, at least on the level of individuals and households...

#### 5.3 Anxieties of the elderly and car mobility

Transport is not easy for a part of the elderly. Walking and cycling can become problematic when health is diminishing, partly due to bad or no pavements, and partly due to only minor cycling infrastructures. Related to car mobility two anxieties are to be noted from the literature. The first is the anxiety related to the loss of car mobility. And the second is the anxiety related to the use of public transport, which is for many elderly rather difficult. The two anxieties are intricately linked.

Scheiner (2006) shows that car driving becomes more difficult for many people after they reach 75. Then "... *it is the hale, healthy and therefore the most satisfied and mobile seniors who frequently own a car"* (Scheiner, 2006, 154). He shows that older households with cars engage in a greater variety of activities than non - car older households, which stay at home far more. The Dutch researcher Tacken concludes the same, and shows that cycling also declines after the age of 75. Older people walk more, and around 40 per cent of the above 75 years old do not leave their houses independently.

In a study from New Zealand (Davey, 2004) the way in which older people try to remain mobile was examined. Stopping with driving was, especially for older men, particularly emotional. It is not an easy and straightforward process and older men have difficulties adjusting to life without a car. Older people that stop earlier with driving have the possibility of developing arrangements for their mobility. Older men often miss the capacity to arrange their mobility in a concise way. Asking for and getting a lift becomes the most important form of mobility for the elderly, more important than the taxi, and in New Zealand certainly more important than public transport. But older people are selective about asking for lifts. They rarely ask for lifts for leisure or social activities. And as a result these activities can diminish. Very long friendships are no longer maintained because the friends cannot reach each other anymore. Lifts are requested for shopping and especially for health reasons such as seeing a doctor or travelling to hospitals. In New Zealand many older people do not leave their house anymore. Problems are not broadly mentioned ; many older people see this as facts of normal modern life and they adjust.

In an Australian study (Department of Infrastructure, 2007,20) is mentioned that getting lifts will probably become more difficult ; "Even where family members do live close by, they are often not as available as previous generations to assist with transport for various reasons. For example, a higher level of female participation in the workforce means less time for non- work activities. Many people are having children later in life and may have both young children and older relatives to look after....the availability of private lifts may therefore be on the decline."

For older people the loss of their capacity to drive is a great problem. Many older people, especially men, persevere in driving, sometimes crossing the line where driving becomes dangerous both for themselves and for other road users. In the U.S, in traffic models insufficient attention has been paid to driving in old age. The car dependence of many older people is relatively high; they postpone the decision to stop, but adapt their driving behaviour, and travel more in off- peak hours.

It is however clear that car mobility is a solution for mobility anxieties of the elderly. This more so because elder people sometimes face problems using regular public transport. Tacken shows that travel by public transport by older households is lower than expected. In his view decision makers overestimate the opportunities of older people to use regular public transport. The high costs, difficult card systems, the problems with getting to and on the bus, the possibility that there will be no seats available, and the fact that older people are sometimes anxious with encounters with strangers are all reasons to avoid public transport. Most older people prefer "travel on demand", mostly serviced by taxis.

Hine and Mitchell (2001) focus on the experiences of the "*public transport captives*", people who have to take public transport because they do not own a car. Many elderly, especially elder women, are captives. An older woman ; "...*it 's carrying the luggage, that's the problem. Public transport is not really geared for luggage*"(Hine and Mitchell,2001,323). Some of the necessary journeys are not made by the "captives', and other journeys are adapted to what is feasible in their condition. An older

couple, slowly walking, went for their shopping three times on the same day by bus to the supermarket. Only in this could all their purchases be transported. Captives also raised the topic of public transport being unpredictable, especially in the evenings, and there are many complaints about the behaviour of the bus personnel. The article paints a picture of a service with a weak innovative attitude, knowing very well that they transport captives. With a car, again, you do not have to be confronted with these disappointing experiences.

To bring this argument further, Stradling et. al (2002) did in Edinburgh a study about the negative aspects of bus transport. Four blocks were identified.

The first and most important block is irritation with other people. It covers drunken passengers, the use of mobile phones, vandalism at the stops, anxiety for personal safety in the evenings, bad driving by bus drivers, and more widely; the behavior of fellow passengers. The second block covers about the laboriousness of the payment system in bus transport. The third block covers anxieties about arriving on time, in the journey, but also at the bus stop. And finally, the luggage is always a difficult element.

From a factor analysis the greatest irritation was "unwanted arousal"; you just want to make a trip, and unasked you are confronted with all sorts of persons and situations that you do not want to deal with, and that confront you with the harsher and bleaker side of public life. In your car you are not confronted with this unwanted arousal, you can close yourself off from these kind of experiences.

More specifically there is fear for criminal acts in public transport. This fear can be explained as fear caused by factors of the public space, that passengers have no ability to control, and feel vulnerable. It is lower perceived reliability and unfamiliarity with the public transport environment which may lead to anxiety. Especially elder women can feel anxious, although men are far more victims of crime (Yavuz and Welch, 2009)

Anxiety of losing independent mobility mostly leads to persevere in driving, also because the public transport alternative does not look promising for elder individuals and households that were accustomed to driving. But this perseverance can lead to greater safety risks for the elderly and for society. More investments in "travel on demand"- schemes could probably be helpful.

## 5.4 Anxiety around children and car mobility

In the last three decades in western risk societies the independent mobility of children has greatly diminished. Or as Holloway and Valentine (2000, 776) stated ; "childhood has been increasingly domesticated". For example, the proportion of children aged under 10/11 undertaking travel outside the home has declined significantly. Interesting figures are presented in Barker (2011, 414) ,Fyhri et.al (2011), Mackett (2010) and Pont et.al (2009). This loss of independent mobility corresponds with an increase in the proportion of children's trips escorted by parents. Parents are escorting their children up to a later age. Veitch et. al (2006,390) notices that also the opportunities for independent outdoor play have become quite limited for children. The idea of "just playing outside somewhere" for children seems to have been lost. Far more time of children is now spend in controlled situations ; at home, in gardens of friends, or in organised leisure activities. And also the school run is now far more motorised than three decades ago. As Fyhri et.al (2011, 709) explain the framework of everyday activities in families with children is characterized by a high degree of employment among the parents, both fathers and mothers, although a relative large percentage of most mothers work part- time. Families with children are highly motorized, and the easy access to the car makes car use almost obvious.

Pooley et.al (2005a and b) made a transversal historic study on mobility patterns in the United Kingdom over a long time period, and they saw the loss of independent mobility of children as almost the only really paradigmatic change. What are the reasons for such a change ? We make a difference between generic and more specific reasons. Two generic reasons (Karsten en Van Vliet,2006) are to be noted. The first is that parents believe that children are not as resilient as they were a generation ago (see Thomsen,2009). Parents until the seventies of the last century were more convinced that their children were resilient and able to solve their own problems. And the second is that parents perceive the urban environments to be less safe then it was when they did grow up. Parents are anxious and feel the need to protect their children.

In the rich literature on this subject three specific reasons can be noticed. The first has to do with the traffic situation. Traffic has grown tremendous in these last three decades, mobility seems to be essential in living modern lives, and the "readability" of traffic and traffic situations has grown to a problem for children. Parental traffic safeguarding has, with the priority on motorized traffic in relation to use of street for other functions, become a necessity, although Tigar Mc Laren and Parusal (2011) saw great differences in magnitude and attitudes of this parental safeguarding between parents of different socio- economic classes.

The second reason is what has been called "stranger, danger". Parents view many of their contemporaries more as potential dangers, than as potential friends. The "front porch interaction" has been lost. Gill (2007,62) on this theme ; "For many children and parents, the immediate neighborhood around the family home is no longer populated with familiar faces. They may have never met, said hello to, or perhaps even set eyes on their neighbors. As parents today look out of their front doors, they see a world that is at best uninterested in their children and at worst hostile to them. Fewer friendly faces mean that support and solidarity from other adults, even in the minimal form of a watching eye, can rarely be assumed. trusting relationships within the modern community are often hard to initiate." It are basically the isolated parents that coin a certain "stranger, danger"- attitude. Stokes (2009) elaborates on the term and considers the problem behind it primarily socially constructed, having more to do with the erosion of adult solidarity than with real and existing dangers coming from strangers. When asked, children have more fears for certain known individuals than for unknown strangers (Stokes, 2009, 13), and are in this respect more in line with the statistics than many of their parents ; danger comes more from within families and friends than from unknown individuals.

The last specific reason is the most difficult to grasp. There is rather diffuse anxiety over the fate of children, especially among middle class and higherclass parents. They consider educating their children towards responsible adults a difficult task, where only little guidance is offered to them. What then happens is following of what seems to them the attitude of the majority of parents in their networks. A definition on what good parenting or good mothering seems to be in relation to risks and car use seems to exist (see for example Murray, 2009, 472, Ridgewell et. al, 2005). The fear for remarks from other parents seems to be a crucial element in denying children independent mobility (Descartes et.al, 2007, Ridgewell et.al, 2005, Barker, 2011, Kearns, 2003). You could be considered a non-responsible parent in letting your child move more freely. From the literature we know that lower class parents leave their children more free in this respect (Lareau, 2002). More study on the creation of "carescapes", and on the related socializing through what should be seen as responsible parental behavior would be appropriate.

How does less independent mobility look like ? Children live more indoors, instead of outdoor, children spent more leisure time in organized activities and clubs, instead of having the gift of unstructured, legato, time, children have a smaller range for their free mobility than children in the past, while their range of dependent mobility has grown a lot, compared to children in the past. Playing and playmates

become choices, often made by parents, where in the past playing and playmates where just there, near to where you lived. Little (2010, 14) noticed that lack of challenging play did often contribute to behavioral problems. And children are more supervised and controlled by their parents. Lower class children on the whole have more independent mobility (Davidson et.al, 2008, 5), and the same holds true for children whose parents have greater networks and are better integrated in their neighborhoods (Prezza et.al, 2006). In an interesting article on children''s independent mobility in Japan (Provi Drianda and Kinoshita, 2011,226) six licenses for this mobility were introduced; to cross roads alone, to walk to places other than school, to travel home from school independently, to use buses, to go out after dark and to cycle alone on main roads. Research on how these licenses have changed in time, looking at a great number of countries would present interesting cross- cultural results.

From research it seems clear that Germany, Japan , the Netherlands and Denmark still keep, although also here diminishing, an certain independent mobility for children. And the other side are the more Anglosaxon countries like the United Kingdom, Austrialia, the United States and Canada, where there is rather little independent mobility of children (Jeekel, 2011, 307 and further). Until now these cultural differences have not been clarified. Why are the sources for this loss of independent mobility, the anxiety of parents for traffic, strangers and bad notes as a parent so much greater in the last mentioned countries ?

The situation on children's mobility has been criticized by eloquent researchers and opinion makers. We already introduced Furedi and Durodie, but the spectrum of critics is far broader (Darbyshire, 2007, Malone, 2007, Tranter and Sharpe, 2008, Estroff Marano, 2004, Gill, 2007).

But is all this criticism justified ? Statistics and literature show that especially lower class children in cities have a higher real risk to be confronted with dangerous situations outdoors (Pain, 2006). There is the importance of gangs and disorderly behavior in public spaces (Pain, 2006, 223). Pain (2006, 237) also qualifies the perspective of Furedi (2001) as "based on a white, suburban, middle class norm", as she noted more dangerous situations in her data, which were largely drawn for children from socially disadvantaged backgrounds. Mothers follow their own risk experiences. They base their decision less on perceptions of risk , and more on their everyday risk experiences (Murray, 2009).

Children themselves have opinions on this theme. They consider strict boundaries superimposed over them not very helpful. Private spaces feel for them more safe than the urban public space (Harden, 2002). And children consider public transport less safe than car traffic (Baslington, 2009, 314). Murray identifies that children develop their own risk landscape and their own strategies to cope with danger (Barker, 2003). Finally: children want in majority more active play and are *"yearning for more unstructured time, just to do their own thing "*(Houlihan, 2005, 14).

As there are remarks to be made by too harsh verdicts on the anxious behavior of many parents, certainly when these parents belong to lower strata of society, the reality remains that independent mobility of children is still diminishing. Escorting is now the fastest growing motive for car use.

Escorting means driving people, mostly children but also the elderly, to clubs, friends, hospitals, schools . For the Netherlands it looks like some 15 per cent of the journeys made by women are for escorting (MON 2009,8.11 category overig). We also have figures for Switzerland; in 2005 94 per cent of escorting was done by car.

And in the British Travel Survey 2006 is stated ; "Including both escort education trips and other escort trips, women aged 30-39 made over 25 per cent of their trips escorting someone else". And in

Germany , for parents with children under 6 years escorting is 26 % of their trips, slowing down to 12 % when children are above 6 years. .

From these data the picture arises that escorting is becoming an important motive for car use; some 11 per cent in trips and 8 per cent in distance, with a peak for women between 30 and 50 years of age with children, where escorting accounts for 25 per cent or more of their trips. Escorting is very car dependent; it looks like more than 80 per cent of the distance for escorting is travelled by car, making escorting one of most car oriented motives (Jeekel, 2013, 240). Escorting can sometimes become more or less a day job as is explained in Descartes et.al (2007) showing how the life of mothers in a richer rather remote suburb in Michigan centres around chauffeuring the children. Performing child transportation is part of their idea of good mothering.

Note that for escorting the second highest mode is walking, and not public transport (Jeekel,2013,241). Escorting and the school run take time, as most travel for these motives is not on highways, but on smaller and slower roads, mostly in built up areas.

Concluding this paragraph, we can state that the car has created a problem of dense traffic, making independent mobility for children more difficult. But the car has also solved this problem; children are driven to where they can play safe and controlled.

## 6. Anxieties and car use in perspective

We have discussed a number of anxieties which ultimately lead to great use of cars. There are a few common denominators in these anxieties. We noticed nine anxieties: on not being on time for appointments, on not being able to follow the tight schedules of the days, on losing control over long commutes, on feeling vulnerable in the public space, on losing your independent mobility as a older individual, on not feeling able to use public transport, on traffic conditions for children, on "stranger, danger", and on not being able to fit in societal norms of good parenthood.

Four common denominators could be identified from this spectrum of anxieties.

The first is on *high expectations*. A lot is expected from households and individuals in our societies. Many households try to live up to these expectations. Appointments should be met in time, behavior should be appropriate, tight schedules should be followed. We seem to create in staccato time all sorts of "musts".

The second is on *losing solidarity and trusting relationships among adults*. We noticed that this is an important source for "stranger, danger". We also see this behind the fear of losing independent mobility by the elderly.

The third one is on *public space*. Public space has become a danger zone where you have to be able to find your way in difficult public transport, where you can get negative experiences, where you are faced with difficult traffic situations.

And the last is on doubt whether *your choices in the past will remain positive in the future*. This is the most clear to be seen in the feelings of the long commuters and of mothers in escorting.

Out of these four common denominators arises a clear picture. Households and individuals in our societies feel they have to live up to high expectations, but they feel in this "living up to" rather alone and lonely, see no permanent solidarity with other people, see no safe and helpful public space, and see no support in their once made choices. They probably feel that they have to cope with everything themselves, and cherish their cars, being their great helpers.

On a societal level we can frame this theme somewhat further. Culturally a division around the positive and negative aspects of the car can be seen. With Freund and Martin, cited by Soron (2008,184) can be noticed that the advantages of cars and car use are to be found in the domain of the individual possibilities, and around individual solutions to cope with difficult problems. The disadvantages are more or less completely to be found in the domain of the commonalities ; the car diminishes the need to invest in social cohesion in neighborhoods, and make disintegration of public spaces easier.

The growing car dependence of our modern western risk societies has ,unintentionally, got the characteristics of an extreme liberal project. The car fits perfectly in a system to "let everybody be happy in its own way".

When we would strive to diminish the anxieties mentioned in this article, and thus reach a lower use of car mobility springing from anxieties, we should focus on finding solutions for the common denominators. To give some directions ; less staccato time and more legato time would help, and the same holds for more slack in time scheduling. More adult solidarity would help. Investing in real relationships between adults would ask for an attitude towards defining common goals and making time to reach these goals. In one sentence: ; we would feel less diffuse anxieties, and create less need to use cars, when we would take the route towards a less "high strung society" in our modern risk societies !

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Het laatste thema is **gemak, comfort en instant gratification**, directe bevrediging van je wensen. Daarover gaat dit laatste, nooit gepubliceerde arttikel.

# CONVENIENCE, COMFORT, AND CAR MOBILITY - RELATIONS AND DILEMMAS, 2015

## Abstract

Convenience and comfort are considered to be important motives for car mobility. But what does convenience mean in relation to car mobility. And how could comfort grow into a key asset of cars ? In this article convenience and comfort, and the dilemma's they can create, are analysed. The analysis is broad in orientation and scope: convenience and comfort are result of growing prosperity, and at the same time key elements in the arrangements and practices of modern prosperous societies.

#### 1. INTRODUCTION

In this article two notions are central, convenience and comfort. These are important notions, and even driving forces, in relation to car mobility. Car use is central in modern western lifestyles. 80 to 85 % of all households in Western European countries have at least one car, and some 30 % of all households have two or more cars available. Between 75 and 85 % of all traveler kilometers in surface transport are made by cars 1).

In the literature many motives for car use can be found ; most mentioned are freedom, identity, flexibility, habit. 2). Also , often mentioned motives for car use are convenience and comfort.

Convenience is seldom operationalized in debates on car mobility. An elaborated definition of convenience is hard to find in the literature. Yale and Venkatesh stated on this issue: "*Through its operationalization in recent research , convenience is overwhelmingly implied to be equivalent to time saving or time buying.* " Mostly authors seem to plunge into operationalizing convenience via convenience goods, convenience products or convenience services. However, the convenience aspect itself is not clarified, and the term becomes synonymous with something like "more easy" 3).

In this article convenience will be described in its relationship to the changing organization of everyday life in the richer countries in the world. As operationalization of convenience the Oxford Dictionary definition ; "convenience is the state of being able to proceed with something without difficulty" is chosen.

Comfort is described by the Oxford Dictionary as ; "a state that contributes to physical ease and wellness can be described as higher and higher valued standards of wellness".

Life in modern western societies has developed towards wellness the last decades as harsher conditions have mostly disappeared and a differentiation in conditions on comfort has taken place. A majority of households and individuals can now create their own spheres, own comfort rituals and own housing temperatures.

This article will elaborate on convenience and comfort in relation to cars and car mobility in the economically most developed societies of the world. Convenience and comfort can be seen as positive assets, but can at the same time create dilemmas in personal life and at a societal level.

#### 2. METHODOLOGY

This article is organized as follows. The German transport researcher Rammler presented the basic insight. He sees mobility as the facilitator for the spatial integration of the social differentiation. Transport infrastructures, and certainly the recent car systems are "both skeleton and nervous system of modern industrial growth society "4). The car, being able to reach nearly all destinations, is essential for the social integration of modern man. This integration is important, as social differentiation continues; functions, tasks and services are spread further away. This development of social differentiation was also facilitated by car use, and each time the car has to connect all these elements. This means still greater car distances, and it means more reliance on the car to reach all the essential elements and services of modern life. Transportation, especially in its most important mode, car mobility can be seen as partly responsible for this social differentiation, and can be seen, at the same time, as responsible for at least some form of new integration via connecting locations ; "...transportation is a force that holds the world together while driving it apart" 5)

This double role of car mobility can also be noted for the function of convenience and comfort. Convenience and comfort can be seen as great helpers for modern households and individuals, but they also create or facilitate patterns and practices with dilemmatic aspects.

Questions to be elaborated in this article are threefold. The first is to define the relationship between the general development of convenience and comfort in modern western societies and the specific convenience and comfort elements related to cars and to car use. These questions will be taken up in paragraphs 3 and 4. The second is to understand which patterns and routines in modern western societies can be seen as directly related to convenience and comfort stemming from cars. This question will be taken up in chapter 5. The third question is to identify which personal and societal dilemma's that seem to be produced are activated by patterns and routines related to convenience and comfort of cars. This question will be taken up in chapter 6. Here we also return to the statements of Rammler.

## 3. CONVENIENCE AND COMFORT IN MODERN WESTERN SOCIETIES

Convenience, as operationalized in 1., did grow in the last decades. In former times individuals – and especially many women - had to spend much time on daily or frequent activities, like cleaning, washing, cooking, or overcoming distances. A great part of this time can recently be spent in other ways. Especially middle -class women have for the first time started to work outside their homes. There is a rich literature on this development, and sometimes convenience products and home appliances are called "engines of liberation" 6).

The extra household income that could be generated with entering the labor market created extra household prosperity. This extra prosperity has led to further rising of standards of convenience and comfort.

And as societies did grew more prosperous, comfort started to be taken more for granted. People seem to feel that normal life cannot exist without high levels of comfort. Comfort standards change in time. To give an example ; around 1960 the inhabitants of Chicago moved their sleeping bags to their gardens during extremely hot weather. Now they put the thermostat of the air-conditioning to a cooler level, using a lot more energy. 7)

There is a relation between growing prosperity and higher expected standards of quality. Van der Brink noted in a broader study; "growing prosperity gives rise to growing expectations. Dissatisfaction arises when modern living conditions cannot meet the standards related to these growing *expectations.*" 8). He clarifies this vision for a few areas of life. In the private sphere, partners expect more from their relationships than ever, the burden of affective problems is growing. In the work sphere demands from employers towards employees are growing, and employees have higher expectations of their careers. It is rather difficult to meet these higher expectations, so often a price is paid in the form of stress and anxiety.

Growth in convenience and comfort often does not seem to find its first source in consumers wishes, but in the work of pioneer technicians, who developed higher convenience and comfort standards. Their pioneer work was implemented by marketeers. Shove on this theme: "Modern comfort has been developed and designed by marketeers, so what we have got used to is a manufactured expectancy, something that we have come to think of as convenience". 9)

In analyzing convenience three basic goals for convenience can be noticed. 10) The first is saving of time and money. The second is diminishing unwanted situations. For example,; luggage does not have to be transported with your own personal bodily energy when using a car. And third goal is to realize instant satisfaction. You can immediately act instead of waiting for some service to arrive.

Especially the first goal, but also the second, could lead to more energy and time available for focused activities, and thus to more energy and time for creating greater economic development. Consumption is in the core of modern western societies, with consumer goods as central elements for practices they facilitate. Practices can be defined as "socially recognized forms of activity, done at the basis of what members learn from others and capable of being done well or badly, correctly or incorrectly" 11) A broader definition is from Reckwitz (2002) ; "A practice is a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described, and the world is understood".12)

In essence, there seems to be a spiral: convenience facilitates prosperity, prosperity leads to higher expectations, and these higher expectations lead via consumption to new practices, that can lead anew to a demand for higher standards of convenience. These higher standards could be met because greater prosperity mostly leads to higher and better paid technical skills and capacities, needed to technically raise comfort and convenience levels.

## 4. CONVENIENCE AND COMFORT RELATED TO CAR MOBILITY

What does convenience mean in relation to cars and car use ?

First a look at *time and personal energy savings*. Cars can create convenience in relation to the other transport modes, because only cars could create seamless journeys over greater distances. In one of the scarce studies on convenience and cars 13) the author signals that the convenience of the car is mostly appreciated when coordination problems exist, and when individuals are obliged to follow time schedules and specific routes to achieve all their daily objectives.

Secondly the *diminishing of unwanted situations*. Cars can create independence. There is no need to see or meet other people , you can just remain on your own, or with other people that you can choose. Cars seem to be able to give a good feeling. Ellaway, MacIntyre, Hiscock and Kearns concluded that car users scored significantly higher than public transport users on feelings of self- esteem, mastery and ontological security 14) 15) And the car is easy with luggage. In fact when you need to transport more than a certain amount of luggage the car is the only transport mode that can transport such luggage without problems.

Thirdly the element of *instant satisfaction or gratification*. With a car you do not have to follow external organized time schedules. You are able to leave immediately for your wished activity at your wished location. You can reach your destination completely or almost completely. Employers and local governments have created in the last decades an abundance of parking space, and only in recent times selectivity and scarcity in delivering parking space has become a more general objective.

Cars have become *more wellness related products* in recent decades. It is now possible to create your own microclimate in a car, with modern techniques and with air-conditioning. In a car you now always will have radio, and you can have even audio or television. Chairs are more comfortable, and there is the comfortable feeling that you can feel safer in your car than in the past, thanks to airbags and other safety- oriented techniques.

In a car you can also *live in your own personal space*. "Personal space" incorporates in the vision of Mann and Abraham 16) two factors – time alone without intrusions, and the ownership of the space involved. In contrast, in a study in Edinburgh about buses, Stradling et al 17) noted that the most important irritation was "unwanted arousal"; you just want to make a trip, and unasked you are confronted with all sorts of persons (like drug addicts) and situations that you do not want to deal with (like aggression in waiting areas), and that confront you with the harsher and bleaker side of public life. In your car you can close yourself off from these kind of experiences. On the other hand, Mann and Abraham concluded that their participants also saw positive social interaction in public transport. They concluded that "personal space is more likely to be an incidental benefit of transport choice than a priority " 18)

## 5. PATTERNS AND ROUTINES RELATED TO CONVENIENCE AND COMFORT IN CARS

Five important convenience and comfort elements were noted; time and personal energy savings, no confrontations with unwanted situations, creating instant satisfaction, growing experiences of individualized comfort, and creating personal space in a vehicle. These convenience and comfort elements could be interpreted as important basic design elements for patterns and routines that have arisen in modern western societies. These patterns and routines form the basis for modern practices. A number of these patterns and routines of modern societies will be described.

## Acceleration in society

The car fits into the practices and arrangements of modern society. There seems to be a growing reliance on transport for conducting life 19). As Urry mentions; we travel in order to be co-represent with others for certain periods of time. 20). This takes in our spread out-societies longer journeys and here the speed of the car comes in. Cars can be time savers 21). Stated the other way around; cars have facilitated an acceleration of societal arrangements, and enable a drive towards more flexibility.22). Acceleration is also better possible because driving gives more wellness than in the past.

## Possibilities for social cohesion at greater geographical scales

Cars can organize the traffic between the nodes in the "interest and attention networks" of modern households. Much of what nowadays seems a normal life with friends at greater distances, with many experiences in different areas of life at several locations, is rather difficult without a car, unless one is rich or very creative. On this point Shove: "*The personalization of scheduling is likely to have long-term and cumulative consequences for the social as well as the spatial and temporal order of society. Effective planning depends on being able to modify and coordinate what other people do* ".23)

Convenience seems to work here in two ways ; it creates extra possibilities for individuals, and it creates extra stress because individuals could be forced to do their work and services in more tight

timeframes and over longer distances, with the argument that the greater convenience allow this new practice. Households often rely on the "travelling around mothers" with time pressures 24). As the German researcher Rammler concludes ; "*The car grows into "…ein Grundausstattung eines volwertigen Gesellschaftsmitglied*" (a basic element for full and able membership of society) 25).

#### Loss of social cohesion at neighborhood level

Basically, the car plays a paradoxical role ; the car creates the built up and maintenance of contact networks over greater distances, and at greater geographical scales, while at the same time diminishing the need to invest and to keep investing in permanent contacts on the small action radius of the own neighborhood, own village or city.

For the middle and higher classes in modern western risk societies this is primarily a neutral statement. But this changes when looking at the lower social strata, who live in essence more local lives. Their action radius is far more often limited to where they were born and raised, and their travel horizons are far smaller 26). A further increase in car dependence will lead to diminishing social cohesion at the neighborhood level ,which is for lower- educated and low income households the most relevant scale.

#### Creation of "excess travel"

In Travel for the Fun of it, Mokhtarian and Salomon 27) describe the pleasures of driving by car. They have their doubts on the vision of transport being predominantly "derived demand". In their view there is certainly driving just for the driving. They look at "excess travel", which is about driving unnecessary miles on routine journeys. People want something more adventurous, just a little detour, want to get away from daily rhythms, and take with full consciousness a longer route. Many people value their car time as a buffer between work time and house time. Many people like longer journeys than the journey they have to make. Cars provide more wellness than ever, and instant satisfaction is possible. People do more with cars than only driving. Each trip is an enterprise on its own. To bring this argument a little further, Laurier works with images in Habitable Cars 28). He shows the possibilities of a phenomenology of car use 29), as he describes a journey to school, also taking other parents' children. For outsiders this looks like a simple trip, but he shows how much advanced thinking, planning and hidden precision has been involved. But a rather dry description of this trip does not show you "...the many mutual obligations, the flavors, the work, the trust, the aid and the generosity"30). And the car becomes in a journey as described a sort of living room. This all means that your car can feel like home.

#### Loss of contact with weather conditions

With a car you are not confronted with the weather conditions. Cars can diminish also here unwanted arousal. Cold, rain and wind can be "switched off" in a car. People in rich societies have an ambivalent relation to these influences 31). For several decades people have been trying to lessen external influences on our bodies. No physical proximity of unknown people, and no experiences of being cold, sweating, or getting wet.

## Creation of compensatory individuality

Cars are important in showing lifestyles, especially for men. Cars are identity - creators. We already noticed that comfort standards can make cars to personal space. Car plus gadgets create possibilities for self- expression.32) This seems important for people who do not have many other opportunities for self- expression. The car has, together with a number of hobbies, the capacity to offer people, who are not able the find their individuality in other spheres of life, a form of compensatory individuality

33) They can create this compensatory individuality through the purchase of a unique car, through developing the skills to repair or build cars, through focussing on their car as an art object.

# 6. BROADER PERSONAL AND SOCIETAL IMPLICATIONS AND DILEMMAS

The six patterns and routines mentioned in the last paragraph will be put into broader perspective in this paragraph. To which type of dilemmas do these patterns and routines lead ? We will identify four dilemmas.

# Stress and the urge to be flexible

Convenience created the possibility to spend more time to other activities than the daily chores. Societies in the western world could be described as "societies on the schedule", as Warde et al conclude in a broader study stating "the obsession with convenience is a hallmark of the society on the schedule" 34) In the type of societies that are created result in permanent urge for more efficiency and more flexibility interrelates with prosperity related to permanent economic growth.

We already noticed that convenience in daily practices created the possibility for especially women to start working from home, thus creating extra prosperity for their households. But working seems also necessary. It looks essential in most richer western countries for middle class households to earn at least one and a half income to be able to live what is considered to be a worthwhile and fruitful life. 35) This shows a difficulty to accept a substantial lower level of convenience. Less convenience will lead to more time use needed for daily chores, less availability to the labor market, and thus to lower budgets to spend for households. This seems to be a seldom explicitly stated "normal wisdom of our age".

At a certain moment the growth in convenience does no longer seem to be able to equalize the stress created by ever growing accommodation of individuals and households towards the exigencies of economic development (with its focus on flexibility, efficiency, hard work, coordination and fixed time slots).

Stress and hurriedness can than break through the artificial boundaries of convenience, as we can see happening with higher stress levels 36). For example, in the Netherlands, a broad survey of the Social Research Organisation SCP concluded that 60 % of the women and 52 % of the men felt pressured a number of times during a week. And this pressure was concentrated between the ages of 30 and 50. Combining tasks and escorting family members played their role; "…Being active in different domains of life means not only an accumulation of activities, but also coping with different expectations and duties, in the different domains. One has to connect and to change gear all the time ". 37). Many people were asked whether they felt hurried 38) 39). People recorded that they felt hurried three times a week ; "the fuss that exists to keep on fixed times for dinner, for work, for school in a very active life, with circumstances that you cannot control is not shown in official statistics ". 40).

## Less need to move yourself and growth in obesity

With the growth of convenience, the necessity to use our human body has diminished 41). People do not have to go to a bank, but just do their banking via Internet. With a washing machine at work, a washboard using human energy is now obsolete. People can now get by car and do not have to walk to and from public transport. The active use of the body for normal day to day activities, , has greatly been diminished in modern western societies. Moving the body is no longer a need, but has become a matter of choice.

In most countries can be seen that the more a transport system is car- oriented, the less adults are walking or biking at a regular basis 42). In the United States most new neighborhoods are now designed without biking- and walking paths. Freund and Martin 43) did analyze the decline of time available for spontaneous physical, non -disciplined, activity ; "to walk is to contest the standard space- time usage"44)

Because this modern system around moving is built on choice, and no longer on necessity, many people withdraw, and can develop in the direction of motionlessness.

Freund and Martin make a connection between the car, and another cause for obesity, the food we eat. In Fast cars, Fast food ; Hyperconsumption and its health and environmental consequences they show how both elements fit in the arrangements of daily life; "*possession of a car in the US is a necessity, fast food for time constrained people a reality*"45) Obesity problems in the U.S. are concentrated in sprawling districts, and in city centers in the U.S. it is rather difficult to get good food without a car (the "food deserts,) 46)

#### Less cohesion in society

For most middle- and higher-class households geographically spread (and spreading!) networks of friends are their primary source of social cohesion. Community life in their own neighborhoods or municipalities is for them of lesser importance. Axhausen, Urry and Larsen elaborate on this issue in The Network society and the networked traveller 47). Every person has his networks, and travels around within this network. Network travelers mostly do not share close bonds with their neighbors. They no longer live local lives. There are some neighborhood contacts, but they do not dominate ; "...for the bulk of the residents the immediate environment around their residence is populated by strangers..

#### Problems with sustainability

Especially the combination of the acceleration society, the growing possibilities for social cohesion at higher geographical scales , the creation of excess travel and the creation of compensatory individuality could lead to unsustainability.,

Because cars are convenient, people also choose cars for trips that do not have to be made by cars (buying cigarettes at the next corner), thus generating a greater amount of cold starts (with the most environmental impacts)

And in using cars ubiquitous , also for trips that could easily be made otherwise, the result could by the creation of a smaller market for (investments in) other transport modes than would be possible. Especially in Anglosaxon countries alternatives for car use have diminished in the last decades (Jeekel)

Cars have a certain life span. In most modern western societies a third of all cars is replaced by new cars within four years, some 40 % within5-10 years, and the last quarter is replaced after 10 years. 48). Especially households who replace cars within five years are vulnerable to the new insights and gadgets of the automotive industry. The idea of "constant and early renewal, earlier than really necessary" fits in the characteristics of modern western consumption societies, but leads to waste.

And finally, also comfort comes with a cost ; households have bought, with comfort motives in mind, far heavier cars, thus diminishing the decline in energy inefficiency and environmental pollution from cars. Annema, Hoen and Geilenkirchen present figures for the Netherlands. Real progress made in energy efficiency in recent years has not been impressive. Between 1998 and 2005 the emission factors of recent bought new cars diminished with 7 per cent, to an average of 170 g/km. The reason

for this limited reduction, and this is the case world wide, is that the greater part of the technical progress on energy efficiency and economy in cars is offset by a huge increase in the purchase of heavier cars, using more energy 49)

#### Rammler revisited

Returning to the statement of Rammler it is now possible to see the double bind character of convenience and comfort, related to car mobility.

| On the one handnew possibilities         | but alsonew dilemmas                            |
|--|---|
| Accelation in society                    | Stress and the urge to be flexible              |
| Cohesion on greater geographical scales  | Less overall cohesion and more feelings of risk |
|  | and vulnerability                               |
| More convenience for car users           | Less convenience for non- car users and loss of |
|  | transport alternatives                          |
| Everything easy to reach by car          | Excess travel and more obeisity                 |
| Compensatory individuality               | Problems with sustainability                    |
| Wellness in cars permanently on the rise | Waste and less energy efficiency through        |
|  | growing car weight                              |

#### 7. CONCLUSIONS

The car seems necessary for saving time, thus creating possibilities to do more activities (compared to other transport modes) in the same time budget or to create prosperity (for example the possibility to start working outside home). Or the car can be needed because a trip cannot be made otherwise.

Car consumption in these situations can only difficult be missed. The argument mostly goes via convenience; the car makes fitting into societal arrangements and social practices convenient. Convenience is here a necessity, sometimes a tragic necessity; most people just have to follow these arrangements and practices of the society they live in, feel unable to criticize these rules and just accommodate. Here the theories on the acceleration of modern western societies of the German sociologist Rosa (2005,2012) are relevant 54).

The other part of car consumption is related to individual choices and wishes, mostly related to instant satisfaction and/or to a wish not to meet strange and new people or a wish not to get involved situations that are framed as problematic. This other part could possibly be changed without damage to societal arrangements for creating prosperity and is not necessary, but just a wish, or a choice of the driver. Most arguments here have a relation to comfort. And habit is important. Habits can change at "tipping points". Behavior is relatively stable, but there are moments when breakthroughs are possible. Gladwell 55) developed a theory for correcting routines, or changing actual routines by freer choices or a new routine, certainly of use. Klöckner 56) searches for these important moments in life. He mentions starting a new education, relocations, getting your drivers license, going to a new school, buying a car and starting a first job, or a new job. Especially at these tipping pints there are " windows of opportunity" for a change in transport modes.

We have created in western societies a type of society with practices in which the car fits perfectly. Cars create the needed convenience for households in time- scarce and complex societies. Without convenience in transport and the time savings convenience products and practices create, society could probably not have accelerated this much. The fact that convenience is possible creates space for faster arrangements, all the time. And comfort mitigates the tiredness of hurried individuals and households, by creating feelings of wellness.

The notions of "convenience" and "comfort", when relating to car mobility could possibly be reframed in two statements:

- Modern households live in a society that asks so much flexibility from them, in fitting into practices and arrangements, that they need the car to help them not to become hurried and stressed (convenience)

- and comfort in and of the car augments the quality of lives of modern households, and makes it possible not to feel too tired or hurried, but to get positive energy and feelings of wellness, even if they are busy and flexible all the time (comfort)

Looking at this reframing it seems understandable that just arguing that convenience and comfort could diminish mostly leads to very negative reactions of intensive car drivers. They just do not know how to live their modern lives properly without the now existing standards of convenience and comfort. These standards are integral parts of practices of modern life, creating social and individual dilemmas and strong forms of unsustainability.

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