

# Automobility of Novice Drivers in Iceland: Socialities, Individuation and Spacings

Virgile Collin-Lange



Faculty of Life and Environmental Sciences
University of Iceland
2013

## Automobility of Novice Drivers in Iceland: Socialities, Individuation and Spacings

## Virgile Collin-Lange

Dissertation submitted in partial fulfilment for the degree of *Philosophiae Doctor* in Geography

#### **Doctoral Committee**

Professor Karl Benediktsson (main supervisor) University of Iceland

Professor Tim Richardson (co-supervisor)
The Swedish National Road and Transport Research Institute

Professor Edward H. Huijbens (co-supervisor) Icelandic Tourism Research Centre & University of Akureyri

#### Opponents

Dr. Jonas Larsen Roskilde University

Dr. Ólafur Páll Jónsson University of Iceland

Faculty of Life and Environmental Sciences School of Engineering and Natural Sciences University of Iceland Reykjavík, June 2013 Automobility of Novice Drivers in Iceland: Socialities, Individuation and Spacings Dissertation submitted in partial fulfilment of a *Philosophiae Doctor* degree in Geography

Copyright © 2013 Virgile Collin-Lange All rights reserved

Faculty of Life and Environmental Sciences School of Engineering and Natural Sciences University of Iceland Askja, Sturlugata 7 101, Reykjavík Iceland

Telephone: 00354 525 4000

#### Bibliographic information:

Collin-Lange, Virgile, 2013, *Automobility of Novice Drivers in Iceland: Socialities, Individuation and Spaces*, PhD dissertation, Faculty of Life and Environmental Sciences, University of Iceland, 176 pp.

ISBN 978-9935-9064-9-6

Printing: Háskólaprent

Reykjavík, Iceland, June 2013

## **Abstract**

This Ph.D. thesis explores the automobility of Icelandic novice drivers from a geographical point of view. Automobility, its system and its regime, has recently been subject to intense discussions among scientists in different fields, ranging from sociology to urban studies. The debates have focused on the importance of cars in current societies, gender issues related to car use, or simply the amount of space dedicated to cars in cities. This thesis will address in particular how young people enter the systemic regime of automobility and how this entry reflects how the system perpetuates itself. In terms of automobility, Iceland is an interesting case, as it is one of the countries in the world with one of the highest rates of car ownership per capita. Car use in Iceland is extensive and young people are not an exception. The high level of car use ties in with a previous planning decision: the transport system of the Capital area of Iceland has been shaped almost exclusively for and by cars. Yet, there are further reasons.

In examining the case of Icelandic young drivers, this thesis explores current and potential theoretical ventures in automobility. It explores the social and cultural structuring upon which the local systemic regime of automobility in Iceland hinges. It first presents the results of a survey submitted to young drivers in Iceland and analyses their responses. The results of the survey show that young people in Iceland use cars extensively. Second, it explores in detail a particular activity – car cruising, or *rúntur* in Icelandic – which has particular cultural and social significance for young drivers in Iceland. By looking at the rúntur, the thesis also analyses how young peoples' participation in car cruising allows individuals to integrate themselves in and cope with the systemic regime of automobility in Iceland, thus elucidating some of the cultural and social elements behind their high level of car ownership and use.

## Útdráttur

Í þessari doktorsritgerð er þýðing einkabílsins meðal ungra íslenskra ökumanna tekin til umfjöllunar út frá landfræðilegu sjónarhorni. Það víðfeðma kerfi, sem einkabíllinn er hryggjarstykkið í, hefur á undanförnum árum orðið fjölmörgu fræðifólki í félagsvísindum að rannsóknarefni. Fræðileg umræða hefur snúist um mikilvægi bílsins í nútímasamfélagi, tengsl kyngervis og bílanotkunar, eða einfaldlega um það pláss sem bílnum er ætlað í borgarrýminu. Í þessari ritgerð er sérstaklega athugað hvernig ungt fólk samsamar sig þessu kerfi einkabílanotkunar og hvernig þetta stuðlar að viðhaldi kerfisins sjálfs. Ísland er áhugaverður vettvangur fyrir slíkar rannsóknir, þar eð það er meðal þeirra landa þar sem bílaeign á íbúa er hvað mest. Bíllinn er almennt mikið notaður á Íslandi og ungt fólk er engin undantekning frá því. Hin mikla bílanotkun er að nokkru afleiðing skipulagsákvarðana fyrri tíma: Samgöngukerfi höfuðborgarsvæðisins hefur verið hannað út frá forsendum einkabílanotkunar. Ástæðurnar eru þó fleiri.

Fræðileg sjónarhorn í rannsóknum á kerfi einkabílsins eru könnuð í ritgerðinni og mat lagt á þau. Þetta er gert með því að beina sjónum að ungum íslenskum ökumönnum. Í ritgerðinni er grennslast fyrir um þær kerfislægu félags- og menningarlegu forsendur sem hið sérstaka form einkabílasamfélagsins tekur á Íslandi. Kynntar eru niðurstöður könnunar sem lögð var fyrir unga Íslendinga og þær túlkaðar. Niðurstöðurnar sýna að ungt fólk á Íslandi notar bílinn í afar miklum mæli. Síðan er horft nánar á tiltekinn þátt í hinni staðbundnu bílamenningu – "rúntinn", sem hefur sérstaka menningar- og félagslega þýðingu fyrir unga ökumenn á Íslandi. Greiningin sýnir hvernig rúnturinn skapar ungu fólki tækifæri til að samlagast ríkjandi kerfi einkabílanotkunar á Íslandi og ná tökum á því. Ritgerðin leiðir þannig í ljós ákveðnar menningar- og félagslegar ástæður fyrir hinni miklu bílaeign og bílanotkun ungs fólks.

То

My husband Gunnar Thorarensen

My brother Thomas Collin-Lange

&

My mother Marie-Claire Lange (1949-1998)

## **Table of Contents**

Lis	st of Figures	III
Lis	st of Tables	IV
Lis	st of Papers	V
Ad	cknowledgements	VI
1		1
ı	Introduction	
	1.1 Ignitions	
	1.2.1 Limitations	
	1.3 Outline of the dissertation	
2	Structure and Methods	11
_	2.1 Methodological choices	
	2.1.1 Methods used	
	2.1.2 Positionality	
	2.1.2 Tostachancy	
3	Automobility: A theoretical approach	. 19
	3.1 The system of automobility	
	3.2 Automobility and youth	. 21
	3.3 Fuelling the system of automobility	. 22
	3.4 Motility, power and space	
	3.5 Automobility and socialities	
	3.6 Automobile individuations	. 26
4	Discussion	. 29
	4.1 Automobility and the car	
	4.2 Young peoples' particular car use	
	4.2.1 Youthful planning and greater social aspirations	
	4.3 Reasons beyond numbers	
	4.4 Socialities and spatial crossovers	. 34
	4.5 The dynamics of automobility	. 36
5	Finish line	. 39
Re	eferences	. 41
D-	was I. Entering the gratem of critemahility. Can are makin and rea hi	
Pa	per I. Entering the system of automobility: Car ownership and use by novice drivers in Iceland	. 49
Pa	aper II. "My car is the best thing that ever happened to me":	F.0
	Automobility and novice drivers in Iceland	. ၁9
Pa	per III. Socialities in motion: Automobility and car cruising in Iceland	. 79
Pa	per IV. "Do you wanna go for a ride?": Automobility, individuation, spacings and car cruising in Iceland	. 99

Appendices	121
Appendix 1. "Að rúnta" in Reykjavík: Exploring mobilities, spaces and methodologies	123
Appendix 2. Automobility and Environmental Concerns in Iceland	131

## **List of Figures**

Figure 1: Automobility: ontological hierarchies	4
Figure 2: Relations between research questions and papers	6
Figure 3: Crashing "Baguette", my then newly acquired Renault Megane	۱7

## **List of Tables**

Table 1: Research questions and their corresponding papers	7
Table 2: Summary of the methods and empirical data collection	. 15

## **List of Papers**

This doctoral thesis is based on four papers. They will be referred to in the text by their respective numbers, as follows:

Paper I. Entering the regime of automobility: Car ownership and use by novice drivers in Iceland. Co-authored with Karl Benediktsson. Published in the *Journal of Transport Geography*, 19(4), 851–858.

Paper II. "My car is the best thing that has ever happened to me": Automobility and novice drivers in Iceland. Resubmitted after revision to *Young: Nordic Journal of Youth Research*.

Paper III. Socialities in motion: Automobility & car cruising in Iceland. Published in *Mobilities*. DOI:10.1080/17450101.2012.743220 (Currently available only online).

Paper IV. "Do you wanna go for a ride?": Automobility, individuation, spacings and car cruising in Iceland. Submitted to *Transfers: Interdisciplinary Journal of Mobility Studies*.

## **Acknowledgements**

I absolutely do not know where to start these acknowledgements. During the many years of this Ph.D. study, I have been involved with a great number of people and/or things who directly or indirectly contributed to my project.

Logically, first, I have to thank my supervisors for their commitment, encouragement, and annoying comments. As an academic parenting team, they taught me a lot and put me back on the right track when I got lost, several times.

Karl Benediktsson, my main supervisor, deserves special treatment. Thank you for the long hours you have spent guiding me through the meanders of academic writing, theoretical wandering and methodological experimentations. Many thanks for your patience, for the hours you spent listening to me and my crazy ideas. I can recall the first time I sat in your office, many years ago, with my bad "Frenglish" and my car hating. I am sorry that you had to see me turn to the evil empire and the dark sides of automobility. Please be sure that I did it willingly for a great cause. Deep inside, I mayor may not still think that "cars are evil" even though I refuse to openly admit it.

Tim Richardson, my second supervisor, deserves a series of special thanks for his academic rigour.

I wish to acknowledge the inputs Edward Huijbens brought to this project, his efficiency and speed when it comes to reviewing and correcting papers, drafts and other writings.

To all three of you, thank you very much. I learned a lot.

I would like to thank all the people in the Department of Geography and Tourism of the University of Iceland. I am very thankful for the opportunities you gave me to teach, to discover and embrace new academic things. It has been a great opportunity, a great learning experience. Thank you. To all my fellow graduate students from the department, I would like to thank you for the nice moments we have spent together.

My dear colleague and officemate Edda R. Waage also deserves a special mention. Thank you for the long hours spent together, working side by side, chatting about everything and nothing. You made our office alive and enjoyable. I admire your academic tenacity and professionalism. You have been an inspiration. Merci.

Many thankful thoughts also go to the people from the Department of Economic and Cultural Geography of the University of Gothenburg for letting me used their facilities during the last months of my Ph.D. study. Special thanks go to the members of the mobility research group of the department for their help, inputs and comments.

As this project has to do with cars, I cannot write these acknowledgements without adding special thanks to my first car; that wonderful blue Renault Megan nicknamed "Baguette". Our companionship has been great. You took me to physical, social and mental places I thought I would never go. We commuted, cruised, crashed together. I am still very sorry about that little road incident. Sorry to have hurt you. I am very glad

that you did not hurt me back. Thank you for showing me what automobility in Iceland was really about: a personal and intimate mobile experience. Thank you. May your road ahead, with your new owner, be safe.

This project would not have been possible without the support of friends and family.

I would like to thank Guðlaugur Hlynur Búasson for having taught me many good things about life, for being fun and having been one of my best escape during my PhD study.

I would like to thank my father Roland Collin for his financial support.

That may seem weird, but I would like to thank also my two adorable purring fur balls: my cats. Thanks May and Jóga for the tenderness and "moral" support when I was feeling lonely and lost when I was working by myself. Thank you for the nap you forced me to take when I was feeling tired, grumpy and annoyed by this project. Your little paws have certainly contributed to this project in some ways.

I would like to take the opportunity to show gratitude to my siblings for being there and being "annoying". Talking about being there for me and being "annoying", my big brother, Thomas Collin-Lange certainly deserves a special acknowledgement. There are no words strong enough to express the gratitude I have toward you. I would not have completed this Ph.D. and be where I am today without your support and the sacrifices you made for us. Thank you for having been a moral support, a fantastic brother, and an extraordinaire parent.

I would like to particularly thank my friend Hanne Krage Carlsen for her support during, for the hours she has spent listening to me whining about my Ph.D., the help she provided and the fantastic lunches, the endless happy hikes, the dangerous volcanoes we conquered and the all the other numerous adventures we have had in Iceland and now in Sweden.

Finally, I would like to thank my dearest and very much loved husband Gunnar Thorarensen. I don't have enough strong words to show my gratitude for your neverending moral, financial, physical support during the years of the completion of this Ph.D. and beyond. Thank you for your unquestionable understanding and be sure that I also totally understood you. As this chapter in my life is closing, I cannot imagine having done it without you and I am very much looking forward our next chapters.

Thank you. Thank you. Thank you.

## 1 Introduction

## 1.1 Ignitions

Iceland is an interesting place to study. Its history, demography, economy and overall geography provide good opportunities for stimulating research. However, while the country is better known for its impressive geological features, its landscapes and more recently its economic turmoil, many aspects of Icelandic society are equally interesting. One aspect that has been somewhat unacknowledged is Iceland's peculiar car culture. Indeed, the nation's high level of car ownership and use is striking compared to neighbouring and car producing countries (*Economist*, 2009; EEA, 1995 - 2009; Hagstofa Íslands, 2009a), as is the density of its traffic infrastructure, especially in the Capital area (Borgarskipulag Reykjavíkur, 1997; Borgarskipulag Reykjavíkur, 1988; Reykjavíkurborg Skipulags- og byggingarsvið, 2001).

With somewhat fewer than 206,000 passenger cars for a little more than 319,000 people (Hagstofa Íslands, 2012), Iceland is among those countries where the use of the private car is most widespread (*Economist*, 2009). During the last few years, the country has been ranked among the top three in the world for the number of cars per 1000 inhabitants, even beating countries with a strong historical tradition within the car industry, such as Germany, France and the United States (for more detailed statistics, see papers I and II). Planning in the capital area has been centred on the car (Reynarsson, 1999). Very little research has been conducted on this vast infrastructure dedicated to the car in Iceland, neither on what is known as the "car system", nor on the "car culture" that has developed in Iceland. The author hopes this project will be pioneering in the field and that it will encourage more research on this particular subject.

In terms of planning and transport behaviour, Reykjavík and its adjacent suburbs with the extensive spaces dedicated to cars could be considered a good example for Sheller and Urry's original definition of the concept of automobility. In short, it describes the individualized movement of persons through space by means of a particular form of technology, namely the car. (Sheller & Urry, 2000, 2003, 2006, Urry, 1999, 2000, 2002a, 2002b, 2002c, 2004). It combines the notions of autonomy and mobility, mediated through a materialized system and technological assemblages. Moreover, automobility is a political system and should be looked on as a regime (Böhm et. al., 2006b). In order to emphasize both the systemic aspect of the concept (Sheller & Urry, 2000) and the power dynamics structuring the regime (Böhm et. al., 2006b), this project uses the term systemic regime of automobility (see chapter 3 for a more complete overview of the concept). What characterises this regime in Iceland are the various political, social and cultural choices that have been made over the recent decades. This thesis will take a particular look at the cultural choices made by individuals under the terms of this regime. Mobility is here the medium by which all these choices are made and provides an opportunity for people to spacing themselves within the regime. This thesis uses the term *spacing* to describe the way people space themselves. The choice of the term is inspired from the writings of Derrida on the role of spaces in texts. For the author, term spacing "denotes the active, productive character of space" (2002, p. 106) A geographer, Malbon, also used the term in his essay on the spaces of clubbing and dancing: He stated "that spacings differ conceptually from spaces in that the former are explicitly never finished, always open to negotiation and thus always in a process of becoming" (1999, p. 64). Both Malbon's and Derrida's use of terms mirrors the way Massey (2005) later defined three characteristic defining spaces: Spaces are the product of interrelations, a sphere of possibility and permanently under construction (2005). The term spacing here is a way to regroup those three characteristics and to apply within questions of mobilities. It defines the actions of coping with those three characteristics. The term spacing is here as an understanding of the individual dynamic processes people use to produce spaces. In other words, it describes how individuals space themselves.

The reasons behind the high level of car ownership and use in Iceland are multiple. There are, of course, the obvious ones of urban and transport planning, which bear great responsibility (Reynarsson, 1999). Along with a car-oriented approach to planning, certain eeconomic and political orientations prevailing in the past have also played a role. As an example, until recently the rule in city planning was to have at least two parking spots per household, and one for each employee of a given company (Reykjavíkurborg Skipulags- og byggingarsvið, 2001) while public transport was clearly relegated as a non-priority. Yet those are only structural reasons. By choosing and favouring a particular form of mobility, politicians, planners and other actors have built up and maintained a systemic regime of automobility centred on the car. The centrality of the car and its connotations with political ideals of independence, autonomy and social mobility have been a key structuring element in the planning orientation of the capital area.

The focus in this thesis is put on the social and cultural aspects of the spaces of the systemic regime of automobility. By pursuing these aims, the project hopes to contribute to current debates about automobility and tackle some of its theoretical issues. The overall aims of this project are twofold and are the inspiration structuring research questions (see part 1.2).

- First, the thesis aims to investigate how individuals make use of automobility and the consequences this has for the individuals themselves.
- Second, the thesis seeks to investigate how the concepts of socialities, individuations and spacings could contribute to a better understanding of automobility and its inherent structuring and ways of being.

During the last decade, numerous scientists from different fields of the social sciences and humanities have been researching the broad and diverse subject of mobility (Adey, 2009; Bonss & Kesselring, 2004; Creswell, 2006; Hannam, Sheller, & Urry, 2006; Jain, 2002; Sheller & Urry, 2006; Stock, 2007; Urry, 2000). Most of those studies have shown the importance of mobility within social and cultural fields and exposed the spatial structures of the systemic regime of automobility (Merriman, 2004, 2009). The spatial dimension is extremely important for understanding the system as a whole. As Hannam (2006, p. 3) has stated: "Mobilities cannot be described without attention to the necessary spatial, infrastructural, institutional, social and cultural moorings that

configure and enable mobilities". As questions about space are at the heart of this project, it will look at how the reproduction of the systemic regime of automobility is a constitutive element of space, but will do so from the perspective of the individual.

The focus is here on novice drivers in the greater Reykjavík area. This is based on two elements. First, their status as newcomers exposes the condition of entry into the system of automobility: as they enter that system, they potentially leave other forms of transportation behind. Their entry means that they will develop new ways to express their mobility, reorganizing and rearranging their mobile patterns and habits within the function of the social and cultural demand of the system of automobility. Second, the rearrangement of their status causes a radical spatial reorganisation of their mobile practices and exposes the inherent spatial dynamics of the regime of automobility. In other words, it uncovers how people are spacing themselves through particular mobile practices. One of the fundamental ideas of this doctoral thesis is that mobility is actually one of the key elements structuring space. As said above, spacings define the permanent, on-going negotiation processes of spatial becoming as experienced by individuals. The on-going process of becoming, in this case an automobile being, involves negotiating the social and cultural moorings of the system, translating them into spaces through transductive activities. This process influences the reproduction of the system and contributes to the individuation of each individual within it. It also influences the reproduction of the system itself, and finally creates the necessary the conditions for one's spacing. Individuals make spaces for themselves, but also for the system as a whole. Thus they sustain it by their everyday practices.

The individual's role in creating his/her environs has animated discussions in geography for decades. In recent times the discussion has revolved around the ideas of structure and agency, explored extensively by geographers and other social scientists in the 1980s and '90s (Crang and Thrift, 2000). In terms of the definitions of automobility cited above, and the systemic regime already discussed, the individual would be placed at the bottom of a strong hierarchy (Figure 1A) where structure dominates agency. Accordingly, automobility would be conceived as a hierarchical system dominated by institutions that design the physical and legal structures that control its operation. These structures are then used by the drivers. But another conceptualisation is possible. More subject-oriented ontologies will be developed in this project. These reverse the hierarchy and emphasise the active role of individuals and the influence they have over the physical structures and the institutional hierarchy (Figure 1B). The systemic regime of automobility can thus be seen as created through individuals and their social actions. This is the approach chosen for this Ph.D.

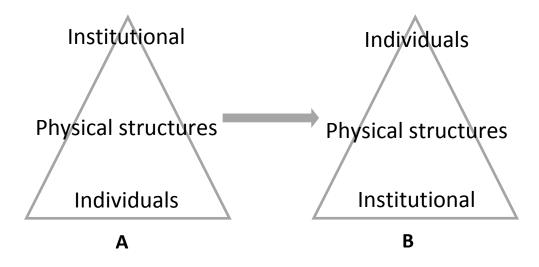


Figure 1: Automobility: ontological hierarchies

Methodologically, this research project can be placed within the so-called 'new mobility paradigm', where a greater importance is given to the social, cultural and power dynamics of individuals' mobilities (Sheller and Urry, 2006). The research involved two distinct phases. The former entailed an extensive questionnaire survey together with participant and non-participant observations. Then, for the latter part of the project, I turned to some 'on-the-move' methodologies (Büscher & Urry, 2009), including interviews taken with young people while they were cruising, as well as photographic methods. Parallel to the use of such methodologies, life itself also happened. I did, in fact, go from being a non-car user (harbouring a slight automobile antagonism) to being a novice driver and a proud car owner. My entrance to the system of automobility even involved a minor car accident (Chapter 2). The whole point of using 'on-the-move' methodologies and to include my own experience in the research was to try to understand automobility as profoundly as possible from a user's perspective. I experienced, along with my subjects of study, the novelty of car-based automobility and the significance of the car beyond its transportative purpose. The methodological choices also mirror the theoretical reflections behind this project and some of the things that have been explored, such as emotionality (see papers II, III, IV), individuation (see paper IV), and my own spacing within the systemic regime of automobility. A more personal and individual-based approach to those theories, as rendered by such 'on-themove' methodologies, gives a greater understanding of how the systemic regime of automobility functions.

Thrift (2004, p. 46) summarizes quite well the theoretical context of automobility when he states that "around a relatively simple mechanical entity, then, a whole new civilization has been built". Automobility irrevocably involves social and cultural reasoning, as it centres on the meaning that people give to their own mobility. What are their values and how and why do they attach those to their mobility? What role does automobility play in one's social life? How is it used by people who define themselves as mobile beings? How does society as a whole reflect one's mobility? These questions are all important. This Ph.D. project moves past an investigation into matters of planning and public policy in Iceland, and investigates the questions of automobility from the perspective of Icelandic novice drivers. Car cruising is here used as an example of how certain activities that are present within the systemic regime of automobility are

indicative of how people enter the regime. The intention here is to study the changes which young drivers encounter when they enter the system, and how they cope with them. It is very important to understand those changes, as they give insights into how a system like the one of automobility sustains itself (Kingsley & Urry, 2009), both socially and spatially, but also how individuals are going to form themselves as individuals fit to access that system. Much has yet to be learned from the user's perspective. This could provide for a greater understanding of one of the most important forms of mobility that has structured the 20<sup>th</sup> century's societies and spaces (Kingsley & Urry, 2009).

## 1.2 Research questions

In order to achieve the twofold aims that were outlined above, two specific foci of empirical research have been developed, as outlined briefly above. For the Ph.D. project as a whole, those foci are co-constitutive, but they also underline an increasing emphasis on theoretical considerations as the project has progressed. Both focus on individuals and how they use automobility. The first focus is almost purely quantitative and is based on the questionnaire survey conducted in the beginning of the work. The second focus is exclusively qualitative and is centred on the 'on-the-move' semi-structured interviews described above.

In relation to these two foci, two sets of major research questions (RQ1 & RQ2) were developed (figure 2). Each set corresponds to a phase of the project and a particular set of methodologies. This means that the scope of the research was narrowed along the way. RQ1 concerns making an empirical assessment of the situation of young drivers in Iceland and RQ2 explores in detail the particular features of that assessment from a more theoretical perspective.

Each of the main research questions is composed of two minor research questions or sub-questions (RQXa: RQXb) in which specific points were explored and contextualized within the academic debates on automobility. Each of the minor research questions was studied in detail in at least one of the paper composing this project. However, the reader may notice that these are not the exact questions found in the papers. The following minor RQ are 'summary' questions that pull together the research questions presented in the papers (See Figure 2 and Table 1).

#### RQ1: How do young people construct and express their automobility?

RQ1a: What is the extent of young people's car use and ownership?

RQ1b: Why do young people in Iceland own and use cars so much? How do the uses of the car by novice drivers impact on their perceptions of space and spatial practices?

Based on the findings of the first research questions, the scope of the research was narrowed by selecting a particular activity – the *rúntur* (car cruising in Icelandic) – as an empirical example of the use young people make of their automobility.

• RQ2: How do socialities contribute simultaneously to the individuation of young people as *automobile* individuals and to their spacings within the systemic regime of automobility?

RQ2a: How do particular socialities such as car cruising contribute to the spatial reproduction of automobility?

RQ2b: How does the concept of individuation help to understand the social and spatial dynamics of automobility?

Empirical results from RQ1 were used as a basis for deeper theoretical consideration in RQ2. The specific result from the survey selected as a base for further empirical and theoretical research was the great importance of car cruising for young Icelanders (reported in the first two papers). Figure 2 below shows the links between the papers. The red arrows show the link between the research questions of each paper. They show the overall continuity in the research questions. The green arrows show the links between the results.

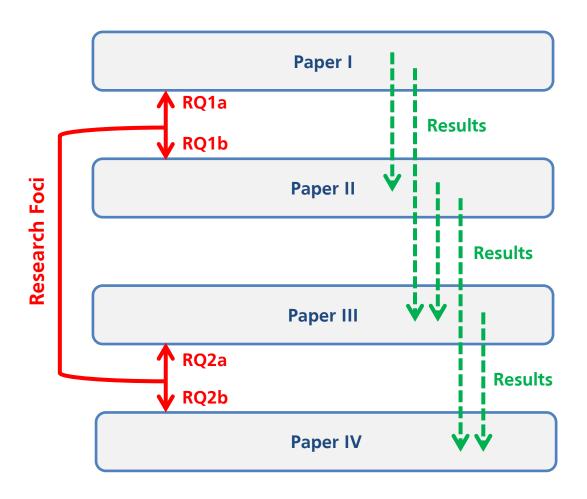


Figure 2: Relations between research questions and papers

Table 1: Research questions and their corresponding papers

Main research question	Sub-question	Paper	Title	Status
RQ1: How do young people construct and express their automobility?	RQ1a: What is the extent of young people's car use and ownership?	I	Entering the regime of automobility: Car ownership and use by novice drivers in Iceland	Published in the Journal of Transport Geography
	RQ1b: Why do young people in Iceland own and use cars so much? How does the use of the car by novice drivers impact on their perceptions of space and spatial practices?	II	"My car is the best thing that has ever happened to me": Automobility and novice drivers in Iceland	Revised and resubmitted to Young: Nordic Journal of Youth Research
RQ2: How do socialities contribute simultaneously to the individuation of young people as <i>automobile</i> individuals and contribute at the same time to the production and reproduction of the spaces of systemic regime of automobility?	RQ2a: What are the links between socialities and automobility? How do socialities such as car cruising, contribute to the spatial reproduction of automobility?	III	Socialities in motion: Automobility and car cruising in Iceland	Published in <i>Mobilities</i>
	RQ2b: Through the empirical example of 'rúntur', how does the concept of individuation help to understand the social and spatial dynamics of automobility?	IV	"Do you wanna go for a ride?": Automobility, individuation and spacings	Submitted to Transfers: Interdisciplinary Journal of Mobility Studies

#### 1.2.1 Limitations

The findings of this project will contribute to the debate about the centrality of the car in transport and urban planning in the Reykjavík area and in Iceland, but from a very particular perspective. Planning and public policy issues will not be directly discussed and this project does not intentionally take a particular point of view regarding the car. The goal is neither to defend nor to make an apology in favour of the car. Too much effort has been put on the car in itself, as a hegemonic object within the debate of automobility. The focus here is put on the car's role as a vehicle of automobility, as a means for the production of mobilities, and not as a form and an expression of materiality as such. Little interest is given to the car as an object here.

One of the limitations that the project encountered is the current set of theories around automobility. The concept in itself is fairly well defined and it seems that there is very little room for further elaboration of it. Difficulties were encountered when I tried to flesh out the concept in light of the results I was getting from the survey and the interviews. They were not corresponding to the image given by current theories of automobility. Given that, it has also proved difficult to theorize and contextualize the findings within the aegis of the current concept. I overcame these difficulties to some extent when I came across the work of Gilbert Simondon (1999) on individuation (see paper 4). Thus this project, by looking at the work of Simondon on individuation for example and combining it with current theories of automobility, shows the way individuals construct and practice their automobility in order to both enter the systemic regime of automobility and to individuate themselves as "automobile beings". My results demonstrate that more research should be done about the inherent mechanism of automobility and that there is still much to learn from the way people conceive their own mobile experiences.

## 1.3 Outline of the dissertation

In addition to this introductory section, the dissertation consists of four independent but linked papers that have been submitted to peer-reviewed academic journals. Some have already been published. The journals were chosen according to the content of each paper (see Table 1).

The introductory section, or the 'thesis'itself, is composed of five chapters. Following on from this first chapter, the remainder contains an outlining in detail of both the theoretical and methodological base upon which each of the subsequently presented paper is built, as well as a discussion of the main empirical findings and theoretical advances made. Chapter 2 presents the structure of the Ph.D. research and the methods. It presents the reasons behind the methodological choices and positions them among the current methodological discussion within the field. My own position within the project is also explored and contextualized. Due to methodological choices, the reader will see that there is extensive autobiographical input throughout the thesis, which has been clarified in order to get a better understanding of the project.

Chapter 3 develops the theoretical framework for this project, most importantly the concept of automobility. It is divided between different themes, inherent in the concept of automobility, that were used for the purpose of the research. First, it starts with an

exploration and a development of the systemic regime of automobility and acknowledges the different contributions of numerous social scientists to the elaboration of this concept. It also exposes the limitations of such a system-centred approach as it seems to be too much focused on the car as an object and is little concerned with the individuals within the system. Second, the centrality of the car within the conceptualization of automobility is explored. Ideas of power and automobility are then investigated, as it appears that they are a key structuring element in one's practicing of automobility. The investigation is pushed further and the questions of power are looked at from a spatial perspective. Following those considerations, I uncover the socialities of the systemic regime of automobility and claim that they are a key structuring element within that system as they contribute to one's personal and collective individuation as an automobile being.

Chapter 4 discusses my own theoretical findings and the way I have personally approached automobility. It also considers the implications of the project. In this chapter, I do take the liberty of expressing my own opinions about automobility and contextualize them within current debates about cars. Chapter 5 then concludes the introductory section of the dissertation.

The four research papers follow, in the order in which they were written. Two related papers that were not part of the original research plan are included in appendices.

# 2 Structure and Methods

## 2.1 Methodological choices

All communicative transactions of these people on the Cruise took place in some sort of sign language. It was a beautiful language which we tried hard to understand and we did at last – and then some – after a long walk through this serious evening-school of life (Þórðarson, 2001[1940], p.175, transl. Hanne Krage Carlsen).

The quote above describes a scene happening around 1909. It is from the semi-autobiographic novel *Ofvitinn*, written by the late Icelandic author (and unwitting social scientist) Pórbergur Pórðarson. What the author describes is a particular mobile practice. A corresponding scene today would be a car-based version of the activity – the *rúntur* in Reykjavík.

Many researchers have implied that mobility is in general a learning process, taking place on several levels. The work of Creswell (2006) on ballroom dancing is a good example. His analysis shows how mobility has been used to condition proper social learning, to create hierarchies between individuals and induct proper social and spatial conduct. Mobility provides a learning opportunity. Keeping that in mind, a researcher of mobility might take the quote above to heart. Researchers have to use these particularities of mobility to their advantage.

Methodologically, automobility is approached mainly from its structures. Researchers are concerned with the car system in itself and its structure (Dunn, 1999; Urry, 1999) and how its different components are interlocked (Urry, 2004), giving a clear picture of how the system functions and how important the car is in that system (Beckman, 2002; Dant, 2004; Dant & Martin, 2001; Miller, 2001a, 2001b). Yet, these studies provide very little insight into the mobile individuals themselves: it does not provide sufficient information regarding what is behind a person's automobility at a personal and individual level. Recognising this, some people began to explore the emotionality of cars (Sheller, 2004), presenting feelings about a certain form of technology and sensing a certain form of movement (Bull, 2004; Sheller, 2004). These researchers have called for a new mobility paradigm. Sheller and Urry (2006) declared that mobility should be approached and studied in a more dynamic way and have encouraged researchers to look for new methods for researching mobility. Researchers cannot explore mobility without being mobile themselves.

Büscher and Urry (2009) have claimed that researchers themselves have to experience the mobility of their subjects in order to understand it and called for the development of 'on the move' methodologies potential catching the emotive and personal contents of mobility and increasing the understanding that we have of it. Geographers have been using mobile methods in some instances (see for example the work of Laurier, 2008). However, drawing on ethnographic research traditions, these projects have been mainly related to places and the way people experienced them, and the role of the researcher within that particular observation (Celle, 2006). Walking, for example, has been described as an opportunity to interact with a place, allowing "the research subject and the place to communicate, allowing the multidimensional experience of a place to flow freely" (Celle, 2006, p. 126) between the different participants, including the researchers. Using that kind of methodology challenges and opposes "colonial and elitist practices. It is the individual being's unique experiences that are in focus" (Celle, 2006, p. 34). Researching young people, for example, does challenge the general point of view on those subjects of studies as they are very often depicted in a negative way (Lumsden, 2009; 2010).

Going back to the field of mobility, and geography, methods on the move are a relatively new thing. Using them within the field of geography allows the researcher to embrace dynamic processes like mobility and spacings. Researchers are thus "actively and critically reflecting on the world and our place within it, we are more able to act in creative, constructive ways that challenge oppressive power relations rather than reinforce them" (Maxey, 1999, p. 201). This echoes Smith (2001) on the political stances taken while using qualitative methodologies and how they seem to be a conscious political act. In the field of geography, such methods could lead to a better understanding of spaces and their constitutive dynamics. In this project, for example, it helped to understand the spatial negotiations in relations to people's mobilities. It appears to be a good way to gain insight into the questions involved.

Being mobile is a learning process, as Pórðarson shows so nicely in his description of the rúntur in Reykjavík. It is about learning how to be mobile among others. It is a process of becoming a functional and acknowledged mobile being. It is an on-going process of negotiation, leading to the making of the individual as a mobile being (See paper IV for more on individuation and automobility). It provides an opportunity to create a space for oneself within a cultural, social and physical context (Creswell, 2006). Automobility is a good example. Many have shown, for example, the links between automobility and the constitution of identity. More than being a mere form of mobility, automobility is a form of power, a set of social relations (Böhm et al., 2006b; Sheller, 2004; Sheller & Urry, 2000). I have previously said that in Figure 1 where I showed that what is it play here is the subject and the power relations he addresses with his/her social surroundings. Using 'on the move' methodologies the researcher gains access to certain spaces, controlled and used by the subject of study, but also makes it his own and consequently gains from it. It is not only about being 'on the move' per se; it is about accessing the spaces, spacings and places individuals encounter while being 'on the move'.

In this project, by getting a driving licence, going car cruising with young people, I wished to investigate it in a more neutral way. Getting a driving licence was also a way to personally, socially and spatially experience automobility. Acquiring a driving licence during the process has been crucial in terms of access to research material, as it gave me the necessary status – social and/or spatial – to perform the role as a researcher but also to witness first-hand the socialities and spacings of my subjects. Rather than some kind of empowerment, I see it as an opportunity of spacing oneself within my own research and thus gaining a better understanding of the situation I was dealing with.

#### 2.1.1 Methods used

First, a survey (see tables 4 and 5 below) was conducted among 553 secondary grammar school students in the Capital area. The respondents included 304 females (54%) and 249 males (45%). As the survey was concerned with novice drivers, the lower age of the respondents was set at 16, which is also the legal age to start driving school, and the upper age limit at 21. The survey was distributed in randomly selected classrooms in eight high schools of the Capital area. A major part of the questionnaire was intended to collect quantitative data, about young drivers and their driving habits. The questionnaire also included several qualitative questions which allowed for personal reflections and comments. The results have been presented in two papers complementing each other (see papers I and II for detailed methods and results). Parallel to the surveying, participant and non-participant observations were conducted (see tables 4 and 5). Among other things, the results of the survey revealed the importance of car cruising for young people. As this project is interested in the way people socially and culturally construct their automobility, special focus was given to that activity in the second phase of the project.

The second data set was composed of in-depth, 'on-the-move', semi-structured interviews with young drivers and passengers, taken while they were car cruising (see tables 4 and 5 below). The choice of the place and conditions of the semi-structured interviews was motivated by the idea of leaving room for the interviewees to express their own thoughts (Dunn, 2005). I was looking for a certain openness (Kvale, 1996) in the participants' answers. It was also an opportunity to gain their trust, as they could ask me questions in return. Some of them even asked if I was spying on them for their parents or for the police. None of them reported taking part in questionable activities; they just did not want their privacy challenged.

For the semi-structured interviews, contact was made with potential drivers through several acquaintances. I asked them if they knew some young drivers interested in taking part in a project about car cruising. If that was the case, my contact information was to be given to the young driver in question and he/she contacted me. Following that initial contact, and if the driver agreed to take part in the project, he/she was supposed to inform me when going cruising, with at least a 30 minute warning (some of them did warn me few days before) and we would agree on a place for me to be picked up. Some friends might be brought along, who would also agree to take part in the interviews. In all cases, drivers came accompanied with at least one person. Some of them picked up friends during the interviews, others dropped the friend they came with after some time and picked up others. Few rules were as well set for the interviews. The goal was not to disturb the usual behaviour of the participants. A first rule was that the pick-up would occur at a location of their choice. Interestingly, all the participants chose to meet at the same place, which is one of the main nodes of the rúntur; a petrol station close to the centre of Reykjavík. A second rule was that during the interviews, I usually sat in the back seat and asked questions. There was one case where I started the interview in the front passenger seat, but because the interviewee picked up a friend, I was sent to the back seat. Answers coming from the drivers were usually guite short compared to those of the passengers, presumably mainly due to the fact that the driver had to focus on his driving down the main cruising street, commonly called the strip. During some interviews, some passengers became the drivers, and vice versa. The

third rule was that the interviews were only conducted when people were actually car cruising. They started when people started their engine and started to cruise and ended when they decided their cruising time was done and they consequently stopped the engine. Eventual stops along the way (ice-cream stores, petrol stations, lighthouses etc.) were considered as part of the cruising activity.

This 'on-the-move' methodology has been presented in more detail, and contextualised within the field of geography, in a conference paper on methodologies presented at the annual *Pjóðarspegill* social science conference at the University of Iceland in 2012. This particular paper is not part of this Ph.D. dissertation, but is attached as an appendix (Appendix 1) to the thesis.

### 2.1.2 Positionality

"You are what you eat" is a rather popular saying, which I think is somewhat relevant when talking about methodologies in mobility studies and the way research in general is conducted. We are all mobile beings. That affects our status as researchers. It influences our way of doing research and this issue has to be fully considered. In my case, two triggering events occurred. First, I got my driving licence and became a novice driver myself while working on the project. Second, I had a minor car crash about a week after getting my licence. Those two events were structuring elements, both in the methodological processes but also in my overall theoretical approach. Allegorically, my previous methodological and theoretical approach – which I would describe as academically static and unchallenging – crashed along with my car. My methodology was redesigned accordingly.

Back in 2006, when I began to research on young drivers in Iceland, I did not have a driving licence. I was a car hater. I was quite snobbish, not to say arrogant when it came to car users. I thought their modal choices were basically stupid, conspicuous and selfish. As an enthusiastic car-free commuter, cars were overall just plain annoying to me. Alternating between biking, rollerblading and walking, I was pretty much happy with my personal level of mobility. At that time, the aim of the project was to try to understand and exemplify the high level of car use in Iceland and eventually to try to tackle it with some "revolutionary" ideas in order to reduce car traffic in the capital area. The methodological design of the research project was accordingly a plan that was the product of my views. As mentioned, during the first methodological phase of the research a questionnaire survey was carried out. Questionnaires are useful of course. They can yield much information; they also allow one to keep a reasonable distance between oneself and one's subject of study. They do not, however, at all challenge one's positionality as the researcher does not personally engage with the subject of study.

Table 2: Summary of the methods and empirical data collection

Paper	Main methods	Details of methods	Empirical data
I	Questionnaire survey. Participant and non- participant observation.	Analysis of quantitative data from survey. Obtaining of driver licence parallel to survey.	Level of car uses and ownership. Type of car use. Type of cars. Distances. Frequency of car use.
II	Questionnaire survey Participant and non-	Interpretation of qualitative data from survey.	Stated reasons behind car use and ownership Indications of other significant car related activities.
	participant observation.	Obtained driver licence parallel to survey.	Field notes about activities and opinions of young drivers-to-be Auto-ethnographic notes.
III	'On-the-move' semi- structured interviews.	Sat in the car with young drivers and interviewed them while they were cruising.	Data on rúntur. Data on what kind of meaning it has for young people?
	Participant and non- participant observation Photographic project.	Participants asked to take pictures of their activities while cruising.	Information on the spatial and social elements of the activity.
IV	'On-the-move' semi- structured interviews.	Sat in the car with young drivers and interviewed them while they were cruising.	Looked into details of the social interactions between different participants in rúntur.  Looked into details of indicators of the specific spatial dynamics, behaviour inherent to rúntur.  Looked for information related to the production and reproduction of the systemic regime of automobility.

Nevertheless, parallel to surveying young drivers' habits in the greater Reykjavík area, my mobile habits had changed. I had relocated myself for several months in the north of Iceland, a six hour drive from Reykjavík. Due to these changes in my geographical location, I decided, reluctantly at first, to undergo the process of getting a driving licence (for more detail, see papers I and II). I soon found myself in an interesting situation. First I had to attend a driving school myself, where I could get first-hand access to young people and young drivers (whom I was surveying at that time). Second. I was becoming one of them. Consequently, that work partially became an autoethnography of a young driver in Iceland. I was experiencing first-hand what it was and meant to be a young driver: from the learning hours, to the social interactions between other drivers-to-be; the growing sense of freedom one feels when starting to drive alone; the several unexplainable hours of unconsciously cruising; and last but not least, the moment my car crashed (see figure 3), after just a few days of driving. It made me realize how important it was to be a young driver, how frail is their construction, their position as a young driver. Along the way, I also learnt the importance of positioning oneself in one's research project. Having been obliged to become a young driver myself is probably the best thing that has ever happened to me as a young researcher in geography, especially for the particular topic of this work (paper II).

In this project, 'on-the-move' methodologies became particularly handy to understand the things I was witnessing and experiencing as a novice driver myself. They framed and made my own experience move forward, especially from what I shall call the methodological crash which I experienced at the end of the questionnaire survey. I was somehow stuck, and had no idea how to move forward with my own results and how to consider the next course of action. The survey had all the time been thought of as a starting point, providing ideas for both theoretical analysis and continued data collection. The 'on-the-move' methodologies were the answer, as I felt that doing another survey in order to complete the first one would be the most appropriate thing, especially when looking for the deeper meaning behind young individuals' mobility.

The use of 'on-the-move' methodologies is part and parcel of the new mobility paradigm developed by Sheller and Urry (2006). The paradigm, and the call for new research methods, have dramatically affected mobility researchers' position, including my own (see Chapter 2, section 2.2). Researchers are obliged to experience for themselves the results of their own theories. My own autobiographical approach has also been to be situated in attempts to profile both the researcher and the researched (Greenfield, 1996 in Butler, 2001). It is to give the reader "a sense of position" (Butler, 2001, p. 272) from which the present research has been made and this thesis written.



Figure 3: Crashing "Baguette", my then newly acquired Renault Megane

Smith (2001, p. 23) explained that doing qualitative research is a "self-conscious political act: a statement about how you believe the world is and should be". My actions as a researcher to look at young drivers in Iceland, to qualify for a driving licence in order to drive among them and include this in my research protocol are my contributions to research as a self-conscious political act. It was about showing that there are ways to look at these young people other than from an accident prevention point of view, or just as plain statistics. The focus on young novice drivers is about their human experience of mobility. Mobile methods are here the best way to catch the particularities and multiplicities of that particular experience. Concomitantly, this challenges the way knowledge about young drivers and their mobilities are constructed top-down, and places "non-dominant, neglected, knowledge at the heart of the research agenda" (Smith, 2001, p. 25). Figure 3 summarizes quite well the thinking process and my own position in the project. The research agenda of this project has been shaped by these ideas and been translated into the ideas presented here.

# Automobility: A theoretical approach

## 3.1 The system of automobility

Automobility was first clearly defined by the sociologists Sheller and Urry (2000) and later actively developed by Urry (2000, 2002b, 2004) and some of his fellow researchers at Lancaster University in the UK. The term, composed of the two units, autonomy and mobility, captures:

a double sense, both of the humanist self as in the notion of autobiography, and of objects or machines that possess a capacity for movement [...] 'Auto' mobility thus involves autonomous humans combined with machines with capacity for autonomous movement along the paths, lanes, streets and route ways of one society after another (Urry, 2004, p. 26).

Automobility is itself a complex element of modern life's encompassing structuring of social practices and ways of dwelling. They are embedded in the physical and institutional territories of automobility. In the original definition of automobility, there is a humanist part and the concept embraces the capacities and needs for individuals to move, preferably autonomously, which has been understood as vital for individuals, as vital as the blood running in our veins (Creswell, 2006). It is almost like holding that being able to move is what makes us human. However, recent works on automobility have perceived it and its surrounding activities as a negative thing. This is actually quite interesting, since automobility seems to be a rather dehumanizing thing, or at least perceived as such in recent works on the subject. Users of automobility have been described as individualistic (Urry, 2004), where social interactions are barely existent, where drivers move around unconcerned by others. The drivers have been overcome by their machines, changed into desensitized hybrids (Thrift, 2004) that are being moved instead of moving by themselves. These hybrids are turned into asocial beings, segregating individuals, places and spaces. In this thesis, I will argue that the importance of the socialities and human interactions are key elements of one's automobility from an individual perspective. Thus I hope in that way to contribute to the little work that has been done on individuals within the field of research on automobility.

As originally formulated, Sheller and Urry's approach to automobility has laid the groundwork for much research. In their definition, six components, which are of importance in this thesis, are highlighted. These range from the structural and institutional characteristics of the systemic regime of automobility to its social and cultural influences. These six components of the system of automobility are best introduced in the words of Urry himself:

- 1. the quintessential manufactured object, produced by the leading industrial sectors and the iconic firms within 20th-century capitalism (Ford, GM, Rolls-Royce, Mercedes, Toyota, VW and so on), and the industry from which the definitive social science concepts of Fordism and post-Fordism have emerged;
- 2. the major item of individual consumption after housing which provides status to its owner/user through its sign-values (such as speed, security, safety, sexual desire, career success, freedom, family, masculinity); through being easily anthropomorphized by being given names, having rebellious features, seen to age and so on; and which disproportionately preoccupies criminal justice systems [...];
- 3. an extraordinarily powerful complex constituted through technical and social interlinkages with other industries, car parts and accessories; petrol refining and distribution; road-building and maintenance; hotels, roadside service areas and motels; car sales and repair workshops; suburban house building; retailing and leisure complexes; advertising and marketing; urban design and planning; and various oil-rich nations [...];
- 4. the predominant global form of 'quasi-private' mobility that subordinates other mobilities of walking, cycling, travelling by rail and so on, and reorganizes how people negotiate the opportunities for, and constraints upon, work, family life, childhood, leisure and pleasure [...];
- 5. the dominant culture that sustains major discourses of what constitutes the good life, what is necessary for an appropriate citizenship of mobility and which provides potent literary and artistic images and symbols [ ...];
- 6. the single most important cause of environmental resource-use. This results from the scale of material, space and power used in the manufacture of cars, roads and car-only environments, and in coping with the material, air quality, medical, social, ozone, visual, aural, spatial and temporal pollution of global automobility. Transport accounts for one third of CO2 emissions and is indirectly responsible for many 20<sup>th</sup> century wars [...];

(Urry, 2004, pp. 25-26)

These components identified by Urry will be discussed in the next section of this chapter as they are ground theories on which this thesis is built upon. Evident in his formulation is the way in which automobility is centred on the car, and thus it is no surprise that subsequent theorising of automobility would veer towards it. This project is not interested in the car as an object as such, but its centrality needs to be acknowledged.

### 3.2 Automobility and youth

Studies of automobility have approach the question of youth from a particular point of view. There are two current views within the field when it comes to youths and their cars. The first one looks at the problems between youth and car use and engage with their supposed over- exposure to accidents. Young people are seen as a problem (Miller 2001) that should be dealt with. The reasons behind such perceptions have yet to be explored. Beyond statistics and road safety prevention initiatives, it can be argued that young people somehow destabilize the current car-based construction of the systemic regime of automobility, as they are a reminder of the general human cost of the system. It could also demonstrate general fear toward youth in general, as pointed out by some academics (Lumsden 2009, 2010). The other perspective on youth and automobility focuses on cultural or "subcultural differences of various kinds of personal transports" (Carrabine and Longhurst, 2002, p 183) from a youth perspective. This is the case, for example, with studies on car cruising habits. However, it should be noted that these studies also address the problematic angle and the social problems related to youth and car use (O'Dell, 2001; Vaaranen, 2004; Falconer & Kingham, 2007; Redshaw, 2008; Lumsden, 2009; 2010; Collin-Lange, 2012).

Within the field of automobility little work has been conducted on the status of young drivers or the meaning they give to car use on an everyday life basis or their contribution to the systemic regime of automobility. They are, after all, entering a system with specific rules and practices that they will have to embrace and to which they will eventually contribute to. Some authors have called for a greater understanding of youth entering the systemic regime of automobility. Further works on youth and automobility are much needed and would contribute to the current holistic approach of automobility as they would strengthen the understanding we have of the relationship between cars and society (Carrabine and Longhurst, 2002). Redshaw, for example, showed they could lead to a better understanding of the overexposure of young people to car accidents (2007). Considering the question of youth within automobility study should be done beyond an ageist perspective as young people car use engage with greater social and spatial statuses and systemic values.

As mentioned above, few of the works on the subject have approached the issues of youth and automobility from the above mention angle. Those works looked into the the particulars subcultures sometimes attached to youth and automobility. Car cruising is one of the main ways of dealing with the issues that young people face. There are a multitude of studies on the subject and that go beyond the subcultural perspective; they present very interesting information on how youth approach their automobility and the dynamics behind it, as exposed by Best (2006) Redshaw (2007, 2008) or Lumsden (2009, 2010) in her piece about young car cruisers in Scotland. These studies have, for example, elucidated questions about gender and automobility. Lumsden. (2009, 2010) looked into youth and masculinity and car cruising (Lumsden 2009, 2010). Before her, Carrabine and Longhurst also explored similar questions about gender and showed that car use among young people exposes "the salience of gender" (2002, p. 183) within automobility. Overall studies on youth and automobility uncover the dynamic of inclusion and exclusion inherent to the system of automobility and show how individuals are sorted within the system and have unveiled the power dynamics between different groups engaging in automobility.

# 3.3 Fuelling the system of automobility

The systemic regime of automobility has the ability to include and exclude potential users. Many authors have pointed out how automobility segregates both the social and spatial factors (Böhm et al., 2006b; Crouse, 2000; Sheller & Urry, 2000; Sheller & Urry, 2006; Urry, 2004, 2006), creating a spatial, 'on-the-move' hierarchy between those who have the means to be mobile according to the rules of the system and those who don't. This particular dynamic is one of the important social components of the system. I believe that the systemic regime of automobility is about power and evidences a specific character of domination over humans and spaces (Sheller & Urry, 2000), an overarching regime that affects both the social and spatial aspects. Socially, the power impacts of automobility have been quite extensively studied. Social isolation in urban and rural areas related to car access has been a recurrent subject (Henderson, 2006; Kingham et. al. 2008). Rephrasing Skeggs (in Sheller & Urry, 2006: 211; Skeggs, 2004), automobility reflects and reinforces power, sorts individuals into "those who have the means to be mobile and thereby be part of the space of flows and those who do not" (Fotel & Thomsen, 2006, p. 536), and produces spaces and places that can be either inclusive or exclusive (cf. Jain & Guiver, 2001).

The systemic regime of automobility is more than a regime of mobility, it is a regime of spatial production that sustains the regime in and of itself as well as its users. It offers its users an incommensurable deployment of physical, institutional and social spaces and places, thus reinforcing their status as an autonomous and mobile being. This is the second component of Urry's definition of automobility. According to him, it is first and foremost a matter of status (see point 1, Urry, 2004, p. 25). Those places and spaces take an active role, both in sustaining the system itself, but also assuring their users of their fitness for the system. Users, such as young people, will seek those places and spaces in order to integrate themselves within the social fabric of automobile identification and assuring its reproduction (see paper IV on individuation and automobility).

# 3.4 Motility, power and space

Being part of the systemic regime of automobility gives the opportunity to create, stabilise and enhance one's social and spatial potential. In other words, it is about 'motility', which defines the capacity of entities (e.g. goods, information or persons) to be "mobile in social and geographical spaces" (Kaufmann, Bergman, & Joye, 2004, p. 750) and refers to the "way in which individuals or groups take possession of the realm of possibilities of mobility" (Flamm & Kaufmann, 2004, p. 3). In other words, motility describes the potential for mobility in space (Flamm & Kaufmann, 2004; Freudendal-Pedersen, 2007). It is a form of capital (Kaufmann et. al., 2004). When considered in the context of automobility, I propose that motility is a plain expression of that potential, from a social and spatial perspective. Spatially, motility demonstrates how "access, competences and appropriation are moderated and conditioned by different spaces" (Kaufmann et. al., 2004, p. 752) and also by different transport technologies. The concept of motility reinforces the idea that automobility is political; a systemic regime, as it encompasses all of the power dynamics, both personal and systemic that the systemic regime of automobility demands. The different actors within the regime are trying to mobilize their capital with the consequences it has for them on a personal level, such as gains in autonomy and mobility, which is the main component of automobility, but also the effects it has on our surrounding spaces in general.

Much has been written about the power dynamics that animate the regime of automobility (Urry 2004, 2006, Böhm et. al. 2006), including the links with status (Urry 2004), race (Best, 2006), and youth (Carrabine & Longhurst, 2002; Deery, 1999; Jensen, 2006; Vaaranen & Wieloch, 2002). In their definition of automobility, Böhm et al. exposed the inherent social power structure, bringing out "the power relations that make that system possible" (2006b, p. 6). I want to stress here the importance of automobility when it comes to spatial production. In addition, automobility should be considered as a spatial discursive context used to produce city spaces and control mobilities to the point of becoming an expression of human territoriality, an idea we can see underlying Urry's approach to automobility is a spatial *regime* that not only socially sorts individuals between their transport means but also sorts them spatially (Mason-Fotch, 2007).

As Implied in Urry's description of the components of automobility (point 3 and 4), automobility is a form of human territoriality. The idea of human territoriality has been developed by Sack and defined as "the attempt by an individual or group to affect, influence, or control people, phenomena, and relationships by delimitating and asserting control over a geographic area. This area will be called the "territory"" (Sack, 1986, p. 19, emphasis original). Automobility is a matter of spaces; who controls those spaces and how they are controlled. The controllers may be institutions, industries, or simply individuals. They form a complex network assuring the sustainment of those spaces. Human territorialities are explored in detail in papers I and II. Mobility is the means by which people are going to assert power over those territories. The processes are not different for automobility. It is structured by all kinds of territories. They are physical, such as roads and parking lots, or whatever other spaces are dedicated to promote and serve the needs of automobility in its pure etymological sense: autonomy and mobility. They are also a symbolic representation of automobility. It is stated in Urry's conception that automobility is a matter of social status. I would go further and say that it is also a matter of spatial status. When becoming a part of automobility, individuals secure their own spatial status and spatially empower themselves through territorializing (see paper IV). They also assure the spatial reproduction of the systemic regime of automobility, both physically and symbolically. As soon as individuals access the system, they will consequently claim its spaces and contribute to their expansion. This is a form of territoriality, which is used in the production of space which is used in order to access, control or influence spaces and places. Individuals succeeding in this regard see themselves empowered within those spaces (see papers I and II). At play here are power and the collective production/reproduction of space, the representations we have of these factors and the spatial practices they induce.

The considerations above about human territoriality and the systemic regime of automobility are derived from Urry's components of automobility and should be thought of as wider spatial representations in the perspective of mobility. For example, the spatial conceptions of Henri Lefebvre (1999) – which greatly contributed to the spatial reflection behind this project, combined with ideas of automobility could be considered as an attempt to access what Lefebvre calls the spaces of representation. We can find that the thinking behind Urry's attempt to define automobility compares to Lefebvre in the ways in which Urry presents symbolic, multiple and complex spaces of

representations by which the systemic regime of automobility sustains itself (see points 2 and 5 of Urry's components). For Lefebvre, individuals are engaging in spatial practices and thus becoming the enactor of social spaces, which may enter into conflict with the space of representations like the ones of the systemic regime of automobility. Curiously an individual's spatial practices also contribute to the sustaining of the spaces of the systemic regime of automobility, as it is in those same spaces that one's practice of automobility is going to happen and be sustained. There is somehow a symbiotic relationship between the individual's spatial practices and the spaces of representations of the systemic regime of automobility. The car becomes a symbol of that spatial relationship. It is part of the social, cultural spatial symbol necessary for the production and reproduction of those spaces and contributes to what Lefebvre has called the "lived space" (1999, p. 35) where the spatial perceptions of the different actors in a given situation come together to form Spaces. In the systemic regime of automobility, symbolism plays an important role in that production and reproduction and the car is a perfect vector for that. Symbolism is particularly well stressed by Urry in his definition (see point 2 of his component). However, that symbolism is something particular to automobility as it is a key to the spaces of representation (see Urry component nos. 2 and 5).

Lefebvre also pointed out the importance and symbolic use of objects (Lefebvre 1999; Elden, 2004), with car being an epitome of that. Within it, individuals use cars to access and conquer the spaces of automobility in which they aim to experience freedom, autonomy and mobility fetishized by and for the car. It all depends on the symbolic uses of that particular object. Symbolism is also a part of the making of Lefebvre's representational spaces which also contributes to the sustaining of the systemic regime of automobility. In addition it elucidates the power relations of the system which have to be thought through the spatial practices of the actors of the system. Those power relations structure the lived and representational spaces and sustain the spaces of automobility. One's practice in those spaces is a form of empowering. Individuals both produce the spaces of automobility but also use them as a spatial catalyst for their own spatial empowerment. It is a spatial opportunity. Automobility thus can be understood as a form of human territoriality.

Automobility as a form of human territoriality has a double sense. On one hand, the users are going to insert themselves within the representational spaces of automobility through their spatial practices; it is an opportunity for individuals to space themselves, situate their bodies, actions and individuality in those spaces and to catch the chance to create, stabilise and enhance their social and spatial status. On the other hand, this process is not independently executed. It is a collective practice: individuals need to be acknowledged by others as automobile beings (see papers I, III and IV). That acknowledgement is both social and spatial and only comes when individuals have the capacities and are given the right to be mobile in particular spaces of automobility. Once that right is acquired and acknowledged, they will contribute to the collective and social production of spaces. Spaces are experienced, negotiated and accessed through mobility. In that context, automobility can be understood as what Simondon (1999) called a 'transductive practice'. This means that the activity perpetuates itself from one user to the next, from one materiality to the other, from one systemic component to the other underlining how the system transduces itself. That perpetuation ties the social fabric together within the systemic regime of automobility, and simultaneously acts upon the spaces of automobility.

Transductive practices, such as car cruising (see paper IV), depend on the social and collective production of spaces. They are material and social collective processes transmitted from one individual to another between the individual and the spatial. They are the collective processes structuring spaces and places. Automobility here is the mediation by which the spatialized body is produced (Lefebvre, 1999; Merrifield, 2000), and contributes to a person's individuation as an automobile being (see paper IV).

# 3.5 Automobility and socialities

The systemic regime of automobility is strongly structured by the social interactions of its practitioners. Social activities are an inherent part of the way individuals construct, express and practice their automobility (see papers I, III and IV). Previous work on automobility and the individual has focused on hybridisation with the machine, becoming "the driver-car" (Dant, 2004). The car seems to have taken over the little humanity the driver might have left, after stepping into the machine. By this it would seem that each assemblage is totally independent of the others. This is something that is missing from Urry's description of automobility: the socialities that are produced and maintained by the system (papers I, III and IV).

There are numerous social interactions between the different actors of automobility. These happen on a day-to-day basis, but also in particular circumstances, where the interactions are actually the main element of the activity. Car cruising is an example of this. Best (2006) has shown that the car creates the togetherness necessary for social interactions. Others have stated that cars are a "vector of communion" (Brownlie et. al, 2007, p. 116, citing Maffesoli). All these arguments are well justified. The car enacts and encourages socialities. However, this work is more interested in the socialities of automobility in itself, somehow detached from the materiality of the car and purely focused on mobility in and of itself. Some authors have pointed out the importance of social relations involved in the very process of automobility (see for example Böhm et al., 2006a), that those social relations display and perform social class, group belonging and identities (Latimer & Munro, 2006; Rajan, 2006) and how they induce behaviours and practices that "step outside of the widely accepted rituals and customs of social interactions" (Latimer & Munro, 2006, p. 48).

Social behaviour and social interactions are key structuring elements of the regime of automobility. They go far beyond being a simple display of the driver's belonging to a particular social group or class; these interactions go beyond the car as object and elicit socialities strictly based on human interactions. The car is just a mediating element in those interactions. The systemic regime of automobility relies on them in order to perpetuate itself. The way car cruising has been studied within the academic field is a good example of this. The activity has mostly been considered negatively, or presented as such. It generally has a bad image (Gofman, 2002-2003, 2004, Goldberg, 1969; Lumsden 2009, 2010, Redshaw, 2009) and does not seem to belong to the current definition of automobility. One of the reasons might be the bad image the car carries. This is why considering the inherent socialities of automobility are important, as it fills up a certain gap in the definition. Urry's approach is built on measurable commodities (money, infrastructures, the car or simply the environment). Social activities do not really fit that definition. They do not produce anything concrete and cannot be physically measured. Cruising is the prime example of socialities used in this thesis. The existing

literature on automobility deals with cruising to some extent (Gofman, 2002-2003, 2004; Goldberg, 1969; Lumsden, 2009, 2010). Yet very few authors have attempted to contextualize the activity within the concept. It is perhaps hard to situate activities such as "dogging" in the academic field. "Dogging" describes people that meet in designated parking lots and streets to engage in sexual activities (Bell, 2006; Loudgine, 2009). Yet those activities are a part of how some people partially conceive their automobility. They involve people using cars and automobility for another purpose than that of transportation. As many have pointed out, those activities are extremely important when it comes to individual practices of automobility (Lumsden, 2009, 2010; Redshaw, 2007, 2008). Other examples include boy racers (Lumsden, 2009) and the infamous Swedish *raggare* (O'Dell, 2001). The work of O'Dell on *raggare* – the Swedish version of car cruising, illustrates the moral and social panic around cruising. The activity seems to endanger individuals. Young women leaving the sidewalk, crossing bushes to climb into the cars of young men, challenge their own social position and/or corrupt their social selves (O'Dell, 2001).

All these different cruising activities depict specific cultural and social practices that have yet to be framed within mobility studies and particularly within automobility. The car is of course central to all this work, but mobility in itself is an extremely important matter. It allows for the depiction of larger societal and local perceptions of gender and youth (for a more complete overview of the definition and the literature, see papers I, III and IV).

Cruising, dogging and other non-transportative forms of automobility are belittled because they physically and socially defy the common definition of automobility, both of automobile and norms. They are a form of social resistance to the way the system has been conceived. What the activity is really threatening is the social structure of automobility as it challenges power structures and ruling institutions, as well as ideas about gender and youth. The car itself is not the threat. It is the mobilities produced by cars and their uses that threaten. In this way mobilities contribute to the production of the individual.

### 3.6 Automobile individuations

As briefly evoked in the previous sections, Simondon's ideas about transduction and individuation are useful for understanding how individuals practice their automobility. Simondon claims that individuals come into being in the course of an on-going process (Simondon, 2007). It is a process of becoming, using both the social and the spatial. Automobility exemplifies the way that this "coagulation", as Simondon terms it, occurs (Chateau, 2008; Simondon, 1992, 2007). Automobility propagates itself from one individual to another, through a set of complex social, institutional and physical relations within the systemic regime of automobility. In this sense it is perceived as a transductive activity, as Simondon defines it. It thus implies a certain social continuity between the different actors of automobility. Drivers rely on other drivers, through their cars, to be acknowledged as such. The systemic regime sustains itself through the potential social interactions. Transduction, here, is possibly one way of framing and understanding how this sustaining happens.

As presented above, automobility is structured by power relations (Böhm et al., 2006b) which entail instability, thus rendering the regime of automobility malleable to change. As Kingsley and Urry (2009, p. 49) put it: "systems are organized, powerful and structured but they do not naturally or necessarily move to stability". The system is based on the mismatch between the power relations structuring the system. If individuals manage to overcome that instability, they will consider themselves empowered, both socially (Mohan & Mohan, 2002) and spatially. Yet, this is a potential, or motility (see section 3.1) that individuals have to capitalize on. It is empowering, representing what Simondon (1999) described as a latent potential. Interestingly, that latent potential comes both from the individuals themselves, and also from the system.

Simondon defines individuation as the process which comes into being. Individuation is based on socialities. Simondon claimed that:

individuation must be thought of as a partial and relative resolution manifested in a system that constrains latent potentials and harbours a certain incompatibility with itself, an incompatibility due at once to forces in tension as well as the impossibility of interaction between terms of extremely disparate dimensions (Simondon, 1992, p. 300).

The individual is an answer to the original entropy of the system; to its disparities. Furthermore, individuals mobilize spaces; here those of automobility, both as a problem and a resource (Stock & Lussault, 2010) in response to the entropy created by the system. This response is at the same time based on the spatialities of the system, as defined by Sheller and Urry (Sheller & Urry, 2000) but also on the socialities. I have previously stressed the importance of socialities in the structuring of the regime of automobility. In some cases, those spaces are confined to a particular form of technology such as the cars. Symbolically, those cars are bubbles that will mediate one's individuation. As Lash puts it: "(...) we are individuated into our own bubbles and those very bubbles mediate our communication" (Lash, 2012). Socialities in activities such as car cruising mediate the communications between the different individuals within the systemic regime of automobility.

These socialities have to be thought of as part of a transductive process, assuring the reproduction of the system. The activity propagates itself from one automobile being to the other, from one space to others. During that process, people individuate themselves as automobile beings. This individuation is both personal (one person mobilizing his/her mobile capital according to the context in which he/she finds him/herself) and collective. It means that different mobile beings are acknowledging each other as mobile beings. It will also structure and reproduce the system in which it happens. Simondon's rendering of the individual and its genesis exemplifies how the systemic regime of automobility is all about spaces and how they are going to be accessed, negotiated, experienced and appropriated. It is part of the individual's expression of human territoriality through automobility. The process of individuation is parallel to the one of spacing as an automobile being. Individual mobile experiences are not only generative of the individuals as mobile beings, but also of their production of space. The two support each other, as no individuation can happen without space, and no spaces get produced without individuation (see paper IV).

Individuation can be seen as a way to insert oneself within the systemic regime of automobility and access its spaces, but also as a way to sustain the system, and that individuation is systematized, in order to fit the demands of the system. If everything happens properly, the individual will become an automobile being, incorporated into a larger unity – the system of automobility, however strictly dependent on one's ability to be mobile. In this way focusing on being mobile will expose how spaces are being produced and reproduced through mobility.

# 4 Discussion

# 4.1 Automobility and the car

The motor-car is the epitome of 'objects', the Leading-Object, and this fact should be kept in mind (Lefebvre, 1999, p. 49).

Many have written with passion about the car and it seems that one cannot talk about automobility without exclusively linking it to passion: they seem to have fused together. Before the concept of automobility got clearly defined, some had pointed out that the general "taken-for-granted" attitudes toward cars had hidden "the apparently irresistible rise of the car" which had "gone virtually unnoticed" (Dant & Martin, 2001, p. 2) by sociologists and geographers alike. The work of Sheller and Urry has opened new ways to consider the matter. The car became the quintessence of automobility (Urry, 2000). Urry's six components may actually be seen as a detailed elaboration of Lefebvre's motor-car statement quoted above.

However a multitude of theoretical aspects has been presented in order to approach the car apart from the general framework of automobility. For example, the socioeconomic costs (Crouse, 2000), and environmental impacts (Jain & Guiver, 2004) of carbased mobility have been scrutinized and situated within a broader context of political and environmental issues which the world is facing today (Kingsley & Urry, 2009), as originally hinted at in Urry's listing of the six main components. The impact of cars on planning has also been extensively studied, such as the physical and aesthetic impact on the urban fabric, along with their centrality within urban planning (Hamilton-Baillie, 2008b; Henderson, 2006; Krizek & Roland, 2004; Mason-Fotch, 2007; Taylor, 2003). Most social sciences studies of automobility and car use have been related to the meaning of mobility as a whole (Best, 2006; Hagman, 2003; Lochlann Jain, 2002; Redshaw, 2007, 2008; Urry, 2000), and to the social representation of the car as an object of power, individualization (see paper IV), gendering (Lumsden, 2009, 2010; Mellström, 2002; Walker, 2000) and emotionalization (Sheller, 2004) (see papers I, III and IV on the links between emotions and automobility).

The centrality of the car within automobility has been questioned by Böhm et al., the argument being that "there are other transport modes or regimes of automobility possible" (Böhm et al., 2006b, p. 6). Notions of autonomy and mobility should thus not be exclusively attached to the car. Of course the car is currently central to the concept, but as Böhm et al. (2006b, p. 6) claimed "the car is only a particular universality, a particular regime of automobility" and as hegemonic as cars are, "there are automobilities that do not depend upon the car" (2006b, p. 6). This idea is clearly different from Urry's approach. Instead of seeing automobility as a car-based activity only, thus subordinating other forms of urban transportation (see point 4 in Urry, 2004, p. 25), Böhm et al. established a re-centring of the concept of automobility around its

main components – transport technologies, autonomy and mobility. These have underlined and given a certain depth to the power dynamics inherent to automobility. The use of the word *regime* might to some extent surprise, but it really catches the essence of the original six components of Urry's automobility. Moreover, this regime is maintained and reproduced in a systematic fashion. What seems to matter most for current car-based automobility is to sustain its own reproduction by creating a system that not only produces the necessary spaces, but also the human actors, be they individual drivers or collectivities, that make the system possible.

When looking at young people entering what in this thesis is referred to as the systemic regime of automobility, Carrabine and Longhurst have suggested that car use by young people should be seen in the framework of sociability and networks (2002). Best (2006) brings into focus the social nature of the car for young people and shows that the car is used by this particular group as a medium for socializing. Automobility develops then into a form of sociality mediated by the car. As my project examined car cruising in Iceland, it looked into the ways in which this happened. However, the findings of this project do not exactly correspond to Best's findings. Her work shows the importance of the car as an object for young people. She presents it as the medium necessary for a certain form of socialisation within the context of automobility. What I show is that the key element is not the car but the individuals, and their spatial behaviour that displays mobility in itself, or in this case automobility. As the results of the interviews show, young people cruising in Iceland seem to give very little concern to the car and appeal more to their own personal mobility (See papers III and IV). As Böhm et al. (2006b) suggest, and as elaborated in papers III and IV, maybe we should detach the concept of automobility from the car and look at it in different ways, open it and explore it beyond its current expression. Further underpinning this approach, young people in Iceland are on the one hand quite critical about the car and its system. They even claim to some extent that, if they had the choice, they would escape the burden of having a car and opt for other transport modes (see papers I and II). On the other hand, they also cherish this mode of transport because it satisfies their needs for autonomous mobility. In this sense, they are somehow redefining the concept of automobility from a user's perspective. This may also be seen as a challenge for planners as they will have to investigate opportunities to maintain the benefits of a car-based automobility in other transport modes. In this sense, the work of Böhm et al. is an invitation to find such opportunities. This will be discussed further in Chapter 5.

# 4.2 Young peoples' particular car use

The first part of the first research question (RQ1a) was concerned with the extent of young people's car use and ownership. That particular research question is treated in the first paper. The situation of young drivers in the capital area is ambivalent. They find themselves within a system that greatly cherishes and values car-based mobility. They are themselves keen practitioners of automobility and their levels of car use and ownership match the average of their elders (see paper I). If we look at the reasons why they choose to use a car and leave behind other modes of transportation, we can see that they are making a relatively realistic assessment of the conditions under which they live their daily lives. Reykjavík and the whole capital area has been built for and by the car (Reynarsson, 1999) and young people are just adapting themselves to those planning choices. Novice drivers clearly understand the demands of adult life in which

they will have to juggle home, school, work, love, friends and other activities. They greatly value their time. In the current situation, only the car seems to be able to offer them a clear chance to manage all these activities. Their attitude toward cars is typical. Their dependency is based on the assessment they make of the situation. Because the car is so central to what their society is about, they are stuck in what Dupuy (1999, 2001) has called the "magic circle" of automobility, making it nearly impossible to withdraw oneself from it. Albeit spellbound, novice drivers are also quite critical of the situation. Many of them stated in their answers to the survey made at the start of this project that they would, if they could, opt for another transport mode. They even suggested to some extent what could be alternative transport modes for the capital area, such as a tube system or a tramway.

Pushing the investigation a bit further, I have found that young drivers value their previous transport modes, which were at some point in time their best modal choice. These modes corresponded well to their needs then, and this, I found, somehow contradicted and even challenged the main theoretical pillar of this project, dealing exclusively with car-based mobility. Young people did experience autonomy and mobility prior to becoming car users, through other transport modes.

One of the claims I consequently made is that the current definition of automobility should be more open. Others, such as Böhm et al. (2006), have made a similar claim. In the light of my findings – and I don't think Icelandic novice drivers are an exception here, as they experience the same things other young drivers around the world experience – I have come to the conclusion that the most common definition of automobility, as formulated by Sheller and Urry (2000, 2004), could benefit from a greater individual-based point of view as it seems to deepen our understanding of the definition. Furthermore, it does not acknowledge the history of an individual's transport choices and rules out the possibility that people could have autonomy and mobility without using cars. A person's past modal choices function in a similar way as those of car-based automobility. People are usually going to make a modal choice that satisfies their needs for autonomy and mobility in accordance with the situation in which they find themselves. The current definition of automobility ties its users to one, and exclusively one, particular mode of transport, and thus one type of mobile practice, excluding the possibilities of multi-modalities from a day-to-day commuting perspective. It creates a singular context where automobility can be achieved. It does not include the other complex modal constructions people have. It as well excludes any possibility that people could have experienced the two notions of autonomy and mobility before the advent of the car. This is briefly explored in paper 2 in which some young people claim that they had experienced those two notions until a certain breaking point.

Automobility has become a discursive context that has totally taken in ideas of wealth, growth, development and well-being as presented in Urry's components (2004). Other transport modes, such as biking, cannot compete with such discourses. Recent events in global politics concerning environmental problems and economic growth for developing countries illustrate that. The increasing number of cars and the current economic growth rhetoric in China is a good example. This is what Urry calls the "good life discourses" (see point 5, 2004, p. 25) and it is one of the main components structuring the system of automobility. The idea of automobility of course goes beyond monetary and financial reasons. It echoes in many cases freedom and social progress. Yet, this is the underlying tone of the discussion about automobility and it seems sometimes that the car is being used as some kind of a scapegoat for an economic model it is

integrated with but did not create. As a consequence, the car here has to be thought of in a more general political context and has become embedded in the development of capitalism in the western world (Dant & Martin, 2001). Moreover, the capitalistic view has reinforced the fetishization of the car. It has built a pleasure/need system based on one, and only one, form of mobility, which is itself built on the everlasting need individuals have for pleasure: an individualized, emotional, corporeal and selfish form of pleasure. Paraphrasing De Miranda, the car is a *machine jouir* (2009). Unfortunately, that pleasure produces uneasiness and discontent and it is considered by many unreachable, thus making it even more desired. This represents a challenge for planners and politicians interested in those issues as they have to deal with the desires and pleasures sought by individuals but also, and at the same time, with the permanent dissatisfaction they create.

### 4.2.1 Youthful planning and greater social aspirations

Combined with the above theoretical considerations, the results of this project could have interesting implications in terms of planning, especially in Reykjavík. City officials, planners and interest groups have been struggling for years to diversify the transport system. Modal habits are hard to modify. It takes a tremendous amount of effort and political will to get someone out of his/her car once they the individual has got into it. Young people said that they would only do it if the transport system were more practical than the current car- based one. Unfortunately, at the time of writing this thesis, those efforts have been mostly in vain in Iceland. The findings indicate that wider considerations should be given to other transport modes and they should be placed in the systemic perspectives of automobility. One of the great achievements of Sheller and Urry (2000; Urry, 2004) was to show how a transport system successfully implants and sustains itself and how the systemic regime of automobility is transductive to individuations and spacings. The same approach should be pursued for other transport modes. In terms of planning, this project shows that the boundaries, the delimitations of the street, inherent to the system of automobility, are not as fixed as they seem to be (papers I, III). One of main points of those critiquing automobility is the inclusive and exclusive nature of automobility, both from a social and spatial perspective.

Above, and in the papers (I and II), I explained, on the basis of the survey results, that young people in Iceland are fully aware of the cost of automobility and are even prepared to change to another transport modes. But this has to be considered carefully. The investigation showed the undeniable importance of the social and cultural factors in young people's modal choice. Some people in the survey even said that they owned a car because of cruising. These findings show that automobility is not only a social and cultural marker, but also a generational one. It is about transmitting social and cultural values from one individual to the other. The cultural and social reasons behind car use are, for transport planners, the hardest ones to fight. They also reflect political choices already exposed. One of the things I noticed when I interviewed young people cruising is that they were asking for a space in society rather than for a space behind the wheel of a car. What seems to be most lacking for all those young adults is a legitimate social and cultural way of entry into adulthood. Legal limitations on drinking age and presence in bars in Iceland were often mentioned. Young people were not asking to be able to drink earlier, but they were asking to be present among others, despite the drinking. Many of them explained that they felt they were stuck between two worlds: the domestic, which they try to leave behind, and the societal, enclosing the adult world

they are trying to reach. The car was here, as they explained, their best option in order to realize the transition between these two worlds. Shielded by their car, it allowed them to reach a situation in which they were not welcome due to their young age. When thinking in terms of planning issues, larger considerations should be included. For example, allowing younger people in bars could be one. I am not encouraging young people to drink more, but they could have access to bars without being sold alcohol. There is a need for a place for young people in Iceland. The car currently offers that shelter in which they express their feelings, meet with friends and escape domesticity, and find some kind of privacy (see papers I, III and IV). There is a need for a greater reflection on the matter.

# 4.3 Reasons beyond numbers

In the second part of the first research question (RQ1b) I explored in depth the reason behind young people's car use and ownership and studied how it affected their spatial behaviours. This project question draws on the nuances present in the qualitative answers from the survey and is explored in paper II. One of the qualitative results of the survey showed that young people in Iceland are aware of the costs of automobility, or at least they seem to be concerned by them. However, this does not translate into actions when it comes to their own modal choices. Few of them actually called for different transport policies in Iceland. They still drive cars and tend to avoid using buses or bikes, eventually subverting the good intentions of city planners. Paraphrasing Kingsley and Urry in their book After the Car (2009), city planners, car uses, earthlings have to deal with an overbearing transport system centred on cars, that consumes a great deal of the Earth's resources. We also have to be able to respond to the demands of people for moving autonomously and as freely as possible. Environmental concerns are far from being absent here. Few respondents in the survey mentioned their concerns for the environment and car-based air pollution in the capital area. Even though this was not central to this project, it has to be taken into consideration. The environmental cost is ignored by most car users and has been until recently disregarded by city planners and officials. In Iceland, car users do not connect air pollution with cars, although it is the main source of it (see Appendix 2 and Carlsen, 2010). A study conducted in tandem with this project confirmed this (this study was part of a collaboration with the Centre of Public Health at the University of Iceland, see Appendix 2). A 'greening' of Iceland's transport system would certainly benefit from more awareness of the environmental and health problems currently caused by cars in Iceland.

One of the most important power dynamics of the system is the economic dimension. More research should be done on the matter, especially in Iceland, with regard to the present economic crisis which has led to a political crisis. Doing such research could show eventually the absurdity of a capital area's transport system mainly based on one mode of transport and its constitutive economic system. It would furnish a solid ground for planners to change things. One of the drawbacks most frequently mentioned by young people, both in the survey and in the interviews, was the personal and societal financial cost of running a car. Young people are aware of that cost, and several of them even explained that they had a job in addition to their school duties in order to bear the cost of their modal choice. For some of the respondents it even affected their school performance, as some of them stopped or paced their education to be able to

afford their cars. Planning choices reflect political orientations. Modal choices are not wholly personal. They are often related to political and financial orientations. The 2008 economic meltdown in Iceland shows the destructive extent of neo-liberal policy indoctrination in Iceland. The current transport situation is to some extent a vestige of this period. It could also be seen as the pinnacle of more than a half century dedicated to developing a car system based on the symbolic values of independence, autonomy and individuality mirroring Iceland's peculiar history in the 20<sup>th</sup> century. To some extent, the 2008 economic crisis created a transport crisis. It retrenched the debate about cars in Iceland. In the aftermath of the crisis, some people were not able to bear the economic cost of having a car, due to car loans and petrol price hikes. Some of the young people interviewed for the car cruising project explained that, compared to before the crisis, they were cruising less frequently due to economic reasons. Either they did not want to spend too much money on fuel or they were working part time during weekends and were too tired to be cruising. The economic meltdown has yet to impact future planning, especially for the Capital area. Future politicians and planners have yet to show their capacities to both process the impact of the crisis and learn from it in order to effect what would be a more economically sustainable from of transportation.

Those social and cultural structures of Iceland's systemic regime of automobility were particularly scrutinized through the comments written by young people in the survey, and during the time I underwent the process of getting a driving licence myself. One of the most striking findings I made during that time is that automobility is a tool to express human territoriality. The social and cultural structure of the systemic regime offers the individuals involved in the system particular access to certain spaces. Those spaces give to the individuals the opportunity to realize their automobility from a spatial perspective. Furthermore, the uses those people make of those spaces sustain the systemic regime of automobility. In that sense, the empirical results showed that automobility is a form of human territoriality. The social and the cultural dimensions of automobility contribute to human territoriality. Some of the results of the interviews conducted with young people car cruising in Reykjavík also echoed this view (see paper III) and some of the interviewees clearly stated it (see paper IV).

# 4.4 Socialities and spatial crossovers

The results of the 'on-the-move' interviews of people car cruising showed the importance of socialities in the spatial behaviours of young people and in the reproduction of the systemic regime of automobility. The first part of the second research question (RQ2a) explored the links between socialities and automobility. More precisely, the aim of this project question was to understand how socialities contribute to the spatial reproduction of the systemic regime of automobility.

The interviews conducted during this project showed the importance of socialities for the reproduction of the systemic regime of automobility as a whole, both for its individuals, but also for the structure of the system itself. The numerous face-to-face social interactions individuals have inside the systemic regime of automobility contribute to their individuation as automobile beings. These interactions are a key element in the way prospective young drivers access automobility. Taking driving lessons and getting a driving licence is the legal and institutional way of accessing the systemic regime of automobility. However, those lessons and the hours spent studying traffic rules and

road signs do not give full access to the systemic regime of automobility. Aspirant drivers need to interact with other drivers in order to both be acknowledged as drivers but also to learn how to be a driver. Most people cruising in the interviews had been participating in the rúntur for a very long time, even before they had acquired a driving licence. In that case, they were usually passengers. They stressed the importance of the activity being a social learning process, entailing, for example, interactions with other drivers and people on the sidewalks, and the fear of being judged; and how these experiences contributed to the construction of their identity as young drivers. Moreover, the activity also mirrors general aspects of a young person's social life. The car and the cruise offer its participants some kind of enclosed realm where they are able to socially experience themselves through different, rather mundane, themes: friendship, love, loss, sex, family. The cruising experience has to be understood within the systemic regime of automobility, perhaps as an oblique way to access it. This view somewhat contradicts previous writing on automobility, as many researchers have claimed that automobility is an activity that sorts and isolates people (Sheller and Urry 2000; Urry 2000; Urry 2004).

Indeed, in terms of space, there is no doubt that automobility isolates and excludes, as it creates seemingly impermeable boundaries in the urban fabric separating its users from its non-users. The spaces of the street are a good local example: on each side there are sidewalks for people to move, very often separated from the road by parking spots. In the middle you find the road itself, where cars circulate. The delimitations between these different components of the street are very much fixed and bounded in space and time. There are very few crossovers, except the occasional pedestrian crossing painted on the asphalt. However, this project has uncovered particular moments where the boundaries between these different components become more blurry. Evidence of this is found when looking at car cruising. The street where the cruise happens is substantially modified by the activity. On a regular day, it is a 'normal' street, with its delimitations: the sidewalks, the parking spots and the roadway itself. All this is well controlled and delimited according to laws, rules and planning decisions. Each actor in this street respects the rules: the pedestrians stick to the pavement and the cars stay in the roadway. There is very little exchange between them and each of the actors stays within his/her particular space. When cruising happens, all this is challenged. The whole street becomes somehow more fluid, the different actors flowing into each other's spaces without colliding. Pedestrians will walk in front of cars without fearing for their lives. Cars will stop to let the occasional cyclist slide between them. Drivers will actively socially engage with pedestrians. It becomes a very fluid form of mobility, where each mobile being present can freely move in spaces and enhance others' mobility. Maybe this is how automobility should be: an opportunity for people on the move to move as freely as possible, regardless of their means of transportation. It should be seen as providing an opportunity for planners, not as a restriction. So there is hope for city transport planning without rejecting the car wholesale, as things are not as fixed as they seem to be. In the case of car cruising and the street where the activity happens, we can see that the institutional arrangements lose their content. In Chapter 3, section 3.3, I discussed the power structure of the system of automobility. I claimed that the current definition of the system is very much hierarchical, with institutions dominating people. The example of the cruise is a challenge to that hierarchy (paper III). During the activity, the hierarchy seems to be reversed and the power belongs to the individuals and the people. It is a much more collective and egalitarian form of mobility. Each actor seems to have the same weight and there is a great deal of social interaction

which reinforce each driver's role as an individual being. It modifies the power structure of automobility. Physical boundaries are erased. It is mobility in its pure sense, for the people, by the people: a collective mobile experience, where drivers are at the top of the regime's hierarchy.

Once those mobilities are produced, individuals display and use them to "spatialize" themselves. In other words, automobility is, in the context of cruising, about being seen and making spaces, but also about claiming existing spaces, both public and private. Paraphrasing the famous idiom, the spatiality of young people cruising is in the eye of the beholder. Cruising is about externalising, displaying one's mobility and spatiality. In other words, it is about spacing oneself.

# 4.5 The dynamics of automobility

As discussed in the above lines, automobility is structured by complex social and spatial interactions. The aim of the last research question (RQ2b) was to analyse these interactions further and to look at what impact they have on the individual. This project has been centred on individuals and their experience of automobility. The empirical results, both from the survey and the interviews, showed the extent to which automobility is a social activity, how emotions play a key role within the activity and how it also influences individuals' spatial behaviour. Beyond the socialities of cruising, automobility is a social and spatial transductive activity (paper IV). It is about making individuals acknowledged as mobile beings but also contributes to the spatial reproduction of the system. In other words, automobility is a transductive activity leading to the individuation of its users. That individuation is both voluntary and involuntary. It is based on the acknowledged mobile and emotional experiences people have of automobility. In that sense it is both a collective and a personal experience. Individuals socially and culturally situate themselves within a particular mobile experience. Curiously the process is mutual. One individuation will simultaneously contribute to others. The processes of transductive individuation are very important for understanding the social and spatial dynamics of automobility.

First, these processes show that a person does not enter the systemic regime of automobility alone. It is a collective process, involving others, the structure of the system itself and its power dynamics. That entry will contribute to the social and cultural sustaining of the system. Individuals will insert themselves in the mobile social and material fabric of automobility and become part of that system (for more on the social insertion, see papers III and IV).

Second, those processes show how individuals, here individuated automobile beings, space themselves. The term 'spacings' best describes the spatial dynamics and behaviour present in the process. It defines an on-going spatial experience, at the same time co-constitutively affecting both the spatial and the social. It describes a way of being in the world, and how people make use of that way of being to constitute their identities, mobilities and the spaces in which they are going to perform. Additionally, within the context of automobility, individuals draw on the materiality of the car system and the car itself to space themselves. They are charged with meaning and significations like those attached to the car. However, the research conducted for this

project showed that, when it comes to mobility, these objects were just a medium and not the main driving force of the mobility processes in question.

What matters for young people is mobility itself. This shows that mobility might be the key element in the spacing processes. It offers people the opportunity to move through spaces, claim them and use them to build their identities. As defined and shown in paper II, automobility is a form of human territoriality, a way to mark the individual's personal territory. Individuals use it to create and mark spaces, but importantly also their own identities. The process of being an "automobile being" have to be seen in a context of individuals pursuing their personal spatial and social guest with the help of co-signifying others. That may be done by using cars, or by any other means. The thing that matters is that it has to be done, in order to obtain optimum results, within special social and spatial infrastructures. Spacing here occurs in all senses of the term, as it is both made to space oneself, within society, within mundane systems, but also from a more personal perspective. It is a societal, emotional, corporeal mobile experience: a way of being in the world. The attitudes of young people in Iceland towards cars and mobility showed that spacings and socialites are part of the same system: a system relying on mobility to sustain itself. Cruising is more than a way to access the systemic regime of automobility. It is a way to space oneself in society. This shows the importance of mobility for the social and the spatial. It is shows the importance of the collective for the production of individuals and spaces. Mobility is here the element crystallizing the whole process.

# 5 Finish line

The first aim of this doctoral research was to investigate how individuals make use of automobility and to identify the consequences of those uses for the individuals themselves. Second, the research sought to investigate how the concepts of socialities, individuations and spacings could contribute to a better understanding of automobility and its inherent structuring and way of being. The focus here was on the social and spatial dynamics, behaviour and spaces of the systemic regime of automobility. The case of young drivers in Iceland was used as an example of the centrality and the importance of individual practices when it comes to reproducing a systemic regime for automobility, its functioning and its sustainability. The case of young Icelanders shows that parallel to one's entry into the regime, there is a spatial dynamic which both creates the necessary personal conditions for individuals to enter but also to contribute to the reproduction of the spaces in which they evolve: the spaces of automobility. This work has shown the importance of the individual in the processes involving automobility. It has also shown the role that mobility, here represented by automobility, plays in the space-making processes with which individuals engage and in which they develop.

Automobility is a complex concept. There is still a lot of work to be done in this field. One of the reasons why the 'lock-in' of the systemic regime of automobility (Dupuy, 2001; Essebo, 2011) hasn't been unlocked is because it may have been considered from the wrong angle. Too much focus has been put on its most conspicuous element – the car – and too little on the individuals as such. This present work on young drivers showed that beyond the concerns of accidentology and road prevention young drivers are a pertinent source of information on how the systemic regime of automobility works how people individuate themselves into *automobile* beings and how this individuation is conditioned by the system and its inherent structure.

As long as too much focus is put on the car as the main expression of automobility, I think that we shall not be able to move beyond that particular piece of transport technology. Automobility will still be perceived as a negative thing. Automobility is not about the car in itself. It is about individuals and their needs for autonomous mobility, for freedom and independence, and this cannot be reduced to one particular form of technology. The environmental, planning and economic problems we are encountering today with automobility are not unsolvable. We have to look at them from a different angle, away from the car, and focus on the individuals and their needs. This project looked into the needs of young people and demonstrated their importance. More work should be done on automobility from a cultural, social and geographical point of view and more focus should be put on the individuals as such and the relations they build and nurture within the systemic regime of automobility, as they give a great deal of information on how that system sustains itself. Furthermore, researchers within the field of mobility should not be afraid to tackle the issues with innovative and perhaps unfashionable ideas. We should try as much as possible to move out of the vicious circle of the 'cars-are-evil' discourse and look for solutions that include the best of automobility, and focus on its original core – autonomy and mobility – and recognise the potential of other transport modes. Once we have done that, I do believe that we would be automobile, at last, regardless of whatever transport mode we use.

# References

- Adey, P. 2009. Mobility. London & New York: Routledge.
- Beckmann, J. 2004. Mobility and safety. Theory, Culture & Society, 21(4/5): 81–100.
- Best, A. L. 2006. Fast Cars, Cool Rides: The Accelerating World of Youth and Their Cars. New York & London: New York University Press.
- Bell, D. 2006. Bodies, technologies, spaces: on "dogging". Sexualities, 9(4), 387-407.
- Bianchi, A. and Summala, H. 2003. The "genetics" of driving behaviour: parents' driving style predicts their children's driving style. *Accident Analysis & Prevention*, 36: 655–659.
- Blackshaw, T. 2005. Zygmunt Bauman. Abingdon & New York: Routledge.
- Bonss, W. and Kesselring, S. 2004. Mobility and the cosmopolitan perspective. Online discussion paper presented at Workshop at the Munich Reflexive Modernization Research Centre, (SBF 536). [Accessed on the 23<sup>rd</sup> of May 2010]http://www.mobilitypioneers.de/Dokumente/download/November%2020 04/B3\_Workshop\_0104\_Dokumentation.pdf
- Borden, L. 2005-2006. Drive: urban experience and the automobile. Haecceity Inc. Public Lecture Transcripts 2005/2006. [Accessed on the 18<sup>th</sup> of February 2011]. http://discovery.ucl.ac.uk/2328/2/lainBordenlecture.pdf
- Borgarskipulag Reykjavíkur 1997. *Aðalskipulag Reykjavíkur 1996–2016 [General Plan of Reykjavík 1996–2016].* Reykjavík: Borgarskipulag Reykjavíkur & Borgarverkfræðingur-inn í Reykjavík.
- Borgaskipulag Reykjavíkur 1988. *Aðalskipulag Reykjavíkur 1984–2004 [General Plan of Reykjavík 1984–2004]*. Reykjavík: Borgarskipulag Reykjavíkur & Borgarverkfræðingur-inn í Reykjavík.
- Briem, V., Þórðarson, K., and Ragnarsson, Á. 2004. *Sálrænir þættir í umferðarslysum ungra ökumanna [Psychological Factors in Car Accidents Among Young Drivers]*. Reykjavík: Umferðarstofa.
- Brownlie, D., Hewer, P., and Treanor, S. 2007. Sociality in motion: Exploring the tribal consumption among cruisers. In Cova, B., Kozinets, R. V., and Shankar, A. Eds. *Consumer Tribes.* [pp. 109–128]. Oxford: BH.
- Bull, M. 2004. Automobility and the power of sound. *Theory, Culture & Society*, 21(4/5): 243–259.
- Büscher, M., and Urry, J. 2009. Mobile methods and the empirical. *European Journal of Social Theory* 12(1): 99–116.
- Butler, R. 2001. From where I write: The place of positionality in qualitative writing. In Limb, M., and Dwyer C. Eds. *Qualitative Methodologies for Geographers: Issues and Debates* (pp. 264–276). London: Arnold.

- Böhm, S., Campbell, J., Land, C., and Paterson, M. 2006a. *Against Automobility: Social Scientific Analyses of a Global Phenomenon.* Hoboken: Wiley-Blackwell.
- Böhm, S., Jones, C., Land, C. and Paterson, M. 2006b. Conceptualizing Automobility: Part 1. Introduction: impossibilities of automobility. In Böhm, S., Campbell, J., Land, C., and Paterson, M. Eds. *Against Automobility: Social Scientific Analyses of a Global Phenomenon.* (pp. 2–16). Hoboken: Wiley-Blackwell.
- Carlsen, H.K. 2010. Air pollution in Reykjavík and use of drugs for obstructive airway diseases. University of Iceland: Reykjavík.
- Carrabine, E., and Longhurst, B., 2002. Consuming the car: anticipation, use and meaning in contemporary youth culture. *Sociological Review*, 50(2): 181–196.
- Celle, S. 2006. Communicating Place: Methods for Understanding Children's Experience of Place. Stockholm: Acta Universitatis Stockholmiensis / Stockholm Studies in Human Geography.
- Chateau, J-Y. 2008. Le Vocabulaire de Simondon [The Vocabulary of Simondon]. Paris: Ellipse.
- De Certeau, M. 1984. *The Practice of Everyday Life*. Berkeley: University of California Press.
- Crang, M., and Thrift, N. (Eds.), 2000. Thinking Space. London & New York: Routledge.
- Creswell, T. 2006. On the Move. Mobility in the Western World. New York: Routledge.
- Creswell, T. 2010, "Towards a politics of mobility" Environment and Planning D: Society and Space 28(1) 17 31.
- Crouse, D. W. 2000. The real cost of the automobile: a report on recent research. Bulletin of Science, Technology & Society, 20(5): 366–378.
- Collin-Lange, V. 2012. Socialities in motion: automobility and car cruising in Iceland. Published in *Mobilities*. DOI:10.1080/17450101.2012.743220 (Currently available only online.
- Dant, T. 2004. The driver-car. Theory Culture & Society, 21(4-5): 61-79.
- Dant, T., and Martin, P. J. 2001. By Car: Carrying Modern Society. In Groncow, J. and Warde, A. Eds. *Ordinary Consumption*. (2 ed.) (Studies in consumption and markets). (pp. 143–157). London: Routledge.
- Deery, H. A. 1999. Hazard and risk perception among young novice drivers. *Journal of Safety Research*, *30*(4): 225–236.
- Derrida, J. 2002. Différance. Ed. Engelmann, P. Det lille Forlag.
- Dunn, J. A. J. 1999. The Politics of automobility. The Brookings Review, 17(1): 40-43.
- Dunn, R. 2005. 'Doing' qualitative research in human geography; Interviewing In Hay, I. (Ed.), *Qualitative Research Methods in Human Geography*. (pp. 6–7) Melbourne: Oxford University Press.
- Dupuy, G. 1999. From the "magic circle" to "automobile dependence": measurements and political implications. *Transport Policy*, 6: 1–17.

- Dupuy, G. 2001. La réduction de la dépendance automobile [Cutting the Automobile Dependence]. *Cahiers Lillois d'Economie et de Sociologie*, 37: 61–86.
- Economist, 2009. Pocket World in Figures 2010 Edition. London: Profile Books.
- Edensor, T. 2004. Automobilty and national identity. *Theory, Culture & Society*, 21(4/5): 101–120.
- EEA, T. (1995 2009). Vehicle stock, 1995-2009 Retrieved 04/12/2011: http://glossary.en.eea.europa.eu/terminology/sitesearch?term=Car+ownership
- Elden, S. 2004. Between Marx and Heidegger: politics, philosophy and Lefebvre's *The Production of Space*. *Antipode*: 86–105.
- Essebo, M. 2011. *The Story of Sustainable Mobility.* University of Gothenburg, School of Business, Economics and Law: Gothenburg.
- Falconer, R. and Kingham, S. 2007. 'Driving people crazy': A geography of boy racers in Christchurch, New Zealand. New Zealand Geographer 63(3): 181-191.
- Featherstone, M. 2004. Automobilities an introduction. *Theory, Culture & Society*, 21(4/5): 1–24.
- Flamm, M., and Kaufmann, V. 2004. Operationalising the concept of motility: A qualitative exploration. *Mobilities*, 1(2): 167–189.
- Fotel, T., and Thomsen, T. U. 2004. The surveillance of children's mobility. *Surveillance and Society*, 1(4): 535–554.
- Freudendal-Pedersen, M. 2007. Mobility, motility and freedom: The structural story as analytical tool for understanding the interconnection. *Swiss Journal of Sociology*, 33(1): 27–43.
- Gofman, S. 2002–2003. Car cruising: one generation's innocent fun becomes the next generation's crime. *Brandeis Law Journal*, 41(1): 1–31.
- Gofman, S. 2004. The end of cruising. [Accessed January 1, 2011]. http://www.caranddriver.com/features/04q2/the\_end\_of\_cruising-feature
- Goldberg, T. 1969. The Automobile: A social institution for adolescents. *Environment and Behaviour*, 157-185.
- Greenfield, T. 1996. Writing the thesis. In Greenfield, T. (Ed.), *Research Methods:* Guidance For Postgraduates. London: Arnold.
- Hagman, O. 2003. Mobilizing meanings of mobility: Car users' constructions of the goods and bads of car use. *Transportation Research Part D*, 8: 1–9.
- Hagstofa Íslands, 2012. Skrásett ökutæki í árslok 1986–2009. [Registered Motored Vehicles at the End of the Year 1986-2009]. Hagstofa Íslands: Reykjavík.
- Hamilton-Baillie, B. 2008a. Shared place: Reconciling people, places and traffic. *Build Environment*, *34*(2), 161–181.
- Hannam, K., Sheller, M., and Urry, J. 2006. Editorial: Mobilities, immobilities and moorings. *Mobilities*, 1(1): 1–22.

- Henderson, J. 2006. Secessionist automobility: Racism, anti-urbanism, and the politics of automobility in Atlanta, Georgia. *International Journal of Urban and Regional Research*, 30(2): 293–307.
- Jain, J., and Guiver, J. 2001. Turning the car inside out: Transport, equity and environment. *Social Policy and Administration*, 35(5): 569–586.
- Jain, S. L. 2002. Urban errands, the means of mobility. *Journal of consumer culture*. 2(3): 419–438.
- Jensen, M. 2006. Young: Mobility among young urban dwellers. *Nordic Journal of Youth Research*, 14(4): 343 –361
- Kaufmann, V., Bergman, M. M., and Joye, D. 2004. Motility: Mobility as capital. International Journal of Urban and Regional Research, 28(4): 745 –756.
- Kingham, S., Pearce, J., Dorling, D., and Faulk, M. 2008. The impact of the graduated driver licence scheme on road traffic accident youth mortality in New Zealand. *Journal of Transport Geography*, 16(2): 134–141.
- Kingsley, D., & Urry, J. 2009. *After the car.* Cambridge (UK) and Malden (USA): Polity Press.
- Koshar, R. 2004. Cars and Nations. Anglo-German perspectives on automobility between the world wars. *Theory, Culture & Society,* 21(4/5): 121–144.
- Krizek, K. J., & Roland, R. W. 2004. What is at the end of the road? Understanding discontinuities of on-street bicycle lanes in urban settings. *Transportation Research Part D, 10,* 55 –68.
- Kvale, S. 1996. Interviews. London: Sage.
- Lash, S. 2012. Deforming the Figure: Topology and the Social Imaginary. *Theory Culture Society* 2012 29 (4-5): 261–287.
- Latimer, J., and Munro, R. 2006. Driving the Social. In Böhm, S., Campbell, J., Land, C., and Paterson, M. (Eds.) *Against Automobility: Social Scientific Analyses of a Global Phenomenon* (pp. 32–52). Hoboken: Wiley-Blackwell.
- Laurier, E. 2004. Doing office work on the motorway. *Theory, Culture & Society,* 21(4/5): 261–277.
- Laurier, E., Lorimer, H., Brown, B., Jones, O., Juhlin, O., Noble, A., et al. (2008). Driving and 'passengering': Notes on the ordinary organisation of car travel. *Mobilities*, 3(1), 1 23.
- Lefebvre, H. 1999. *La Production de l'Espace [The Production of Space]*. Paris: Editions Anthropos / Editions Economica.
- Lumsden, K. 2009. 'Do We Look Like Boy Racers?' The Role of the Folk Devil in Contemporary Moral Panics. *Sociological Research Online*, 14 (1) 2. http://www.socresonline.org.uk/14/1/2.html
- Lumsden, K. 2010. Gendered Performances in a Male-Dominated Subculture: 'Girl Racers', Car Modification and the Quest for Masculinity. *Sociological Research Online*, 15 (3) 6. http://www.socresonline.org.uk/15/3/6.html

- Machin, M. A., and Sankey, K. S. 2008. Relationships between young drivers' personality characteristics, risk perceptions, and driving behaviour. *Accident Analysis & Prevention*, 40(2): 541–547.
- Malbon, B. 1999. *Clubbing: Dancing, Ecstasy and Vitality*. London & New York: Routledge.
- Mason-Fotch, P. 2007. Watching the Traffic Go By: Transportation and Isolation in Urban America. Austin: University Press of Texas.
- Massey, D. 2005. For Space. London, Thousand Oaks & New Delhi: Sage.
- Maxey, I. 1999. Beyond boundaries? Activism, academia, reflexivity and research. *Area*, 31: 199–208.
- McKnight, A. J., and McKnight, A. S. 2003. Young novice drivers: careless or clueless? *Accident Analysis & Prevention*, 35: 921–925.
- Mellström, U. 2002. Patriarchal machines and masculine embodiment. *Science, Technology & Human Values,* 27(4): 460–478.
- Merrifield, A. 2000. Henri Lefebvre: A socialist in space. In Crang, M., and Thrift, N. (Eds.), *Thinking Space* (pp. 167–182). London & New York: Routledge.
- Merriman, P. 2004. Driving places, Marc Augé, non-places, and the geographies of England's M1 Motorway. *Theory, Culture & Society*, 21(4/5): 145–167.
- Merriman, P. 2009. Automobility and the geographies of the Car. *Geography Compass*, 3(2): 586–599.
- Miller, D. 2001a. Car Cultures: Oxford: Berg Publishers.
- Miller, D. 2001b. Driven Societies. In Miller, D. (Ed.), *Car Cultures* (pp. 1–34). Oxford: Berg Publishers.
- De Miranda, L. 2009. *Peut-on jouir du capitalisme? Lacan avec Heidegger et Marx.*Paris: Max Milo.
- Mogensen, Á., Sigvaldason, S., Jónsson, R., and Baldursson, J. 2000. *Ungir ökumenn:* Yfirlit yfir ráðstafanir til að fækka slysum. [Young Drivers: Overview of recommendations for reducing accidents]. Reykjavík: Rannsóknarnefnd umferðarslysa.
- Mohan, G., and Mohan, J. 2002. Placing social capital. *Progress in Human Geography*, 26(2), 191–210.
- O'Dell, T. (2001). 'Raggare and the Panic of Mobility: Modernity and Everyday Life in Sweden. In Miller, D. (Ed.), *Car Cultures* (pp. 105–132). Oxford: Berg Publishers.
- Rajan, S. C. 2006. Automobility and the liberal disposition. *Sociological Review*, 54, 113–129.
- Rannsóknir og greining 2004. Áhættuhegðun ungra ökumanna: Niðurstöður rannsóknar meðal framhaldsskólanema á Íslandi [Risk Behaviour of Young Drivers: Findings of Research Among Grammar School Students in Iceland].

  Reykjavík: Rannsóknir og greining for Rannsóknarnefnd umferðarslysa.

- Redshaw, S. 2007. "Articulation of the car: the dominant articulation of racing and rally driving." Mobilities 2: 121–141.
- Redshaw, S. 2008. In the company of cars: driving as a social and cultural practice (human factors in road and rail transport). London: Ashgate.
- Reykjavíkurborg 1966. Aðalskipulag Reykjavíkur 1962–1983 [General Plan of Reykjavík 1962-1983]. Reykjavík.
- Reykjavíkurborg 2001. *Aðalskipulag Reykjavíkur 2001–2024 [General Plan of Reykjavík 2001–2024]*. Reykjavík: Skipulags og byggingarsvið Reykjavíkurborgar.
- Reynarsson, B. 1999. The planning of Reykjavík, Iceland: three ideological waves a historical overview. *Planning Perspectives*, 14(1): 49–67.
- Sack, R. D. 1986. *Human Territoriality: Its Theory and History.* Cambridge: Cambridge University Press.
- Sheller, M. 2004. Automotive emotions: Feeling the car. *Theory, Culture & Society*, 21(4/5): 221–242.
- Sheller, M., and Urry, J. 2000. The city and the car. *International Journal of Urban and Regional Research*, 24(4): 73–757.
- Sheller, M., and Urry, J. 2003. Mobile transformation of 'public' and 'private' life. *Theory, Culture & Society*, 20(3), 107–125.
- Sheller, M., and Urry, J. 2006. The new mobilities paradigm. *Environement and Planning A*, 38(2): 207–226.
- Shurmer-Smith, P., and Hannam, K. 1994. Worlds of Desire, Realms of Power: A Cultural Geography. London: Edward Arnold.
- Simondon, G. 2001. Du Mode d'Existence des Objets Techniques [Technical Objects and Their Mode of Existence]. Paris: Aubier Philosophie.
- Simondon, G. 1992. 'The Genesis of the Individual'. In Cary, J., and Kinter, S. Z. (Eds.), *Incorporations* (pp: 297–319). New York: Urzone.
- Simondon, G. 2007. L'Individuation Psychique et Collective [Psychic and Collective Individuation]. Paris: Aubier Philosophie.
- Skeggs, B. 2004. Class, Self, Culture. London & New-York: Routledge.
- Smith, S. 2001. Doing qualitative research: from interpretation to action. In Limb, M., and Dwyer, C. (Eds.) *Qualitative Methodologies for Geographers: Issues and Debates* (pp. 23–40). London: Arnold.
- Stock, M. 2007. *Mobility as "arts of dwelling": conceptual investigations*. Paper presented at the Annual meeting of AAG 2007. [Accessed on the 12<sup>th</sup> of October 2010].
  - http://halshs.archivesouvertes.fr/docs/00/36/64/52/PDF/dwelling\_stock\_2007.pdf
- Stock, M. and Lussault, M. 2010. "Doing with space": towards a pragmatic of space. *Social Geography*, 5: 11–19.
- Thrift, N. 2004. Driving in the city. Theory, Culture & Society, 21(4/5): 41–59.

- Urry, J. 1999. Automobility, car culture and weightless travel. University of Lancaster. [Accessed on the 23<sup>rd</sup> of January 2009] http://www.lancs.ac.uk/fass/sociology/papers/urry-automobility.pdf
- Urry, J. 2000. Sociology Beyond Societies: Mobilities for the Twenty-First Century. London: Routledge.
- Urry, J. 2002a. Inhabiting the car. Department of Sociology, Lancaster University. [Accessed on the 26<sup>th</sup> of November 2008]. http://www.lancs.ac.uk/fass/sociology/papers/urry-inhabiting-the-car.pdf
- Urry, J. 2002b. Mobility and proximity. Sociology, 36(2): 255–274.
- Urry, J. 2002c. *Mobility, time and the good life.* Paper presented at the Ville en Movement [Accessed on the 26<sup>th</sup> of November 2008]. http://www.ville-enmouvement.com/telechargement/040602/paris.pdf
- Urry, J. 2004. The "System" of automobility. Theory, Culture & Society, 21(4/5): 25-39.
- Vaaranen, H. 2004. The emotional experience of class: Interpreting working-class kids' street racing in Helsinki. [Proceedings Paper]. *Annals of the American Academy of Political and Social Science*, 595: 91–107.
- Walker, L., Butland, D. and Connell, R.W. 2000. Boys on the road: Masculinities, car culture, and road safety education. *Journal of Men's studies*, 8(2): 153–169.
- Þórðarson, Þ. 2001. Ofvitinn. Reykjavík: Mál og menning.

# Paper I

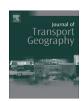
# Entering the system of automobility: Car ownership and use by novice drivers in Iceland



Contents lists available at ScienceDirect

### Journal of Transport Geography

journal homepage: www.elsevier.com/locate/jtrangeo



# Entering the regime of automobility: car ownership and use by novice drivers in Iceland

Virgile Collin-Lange \*, Karl Benediktsson

Department of Geography and Tourism, University of Iceland, Askja, Sturlugata 7, IS-101 Reykjavík, Iceland

#### ARTICLE INFO

Keywords: Automobility Modal choice Novice drivers Iceland

#### ABSTRACT

This article investigates how young individuals access the regime of automobility. Instead of looking at the systemic nature of automobility, the article concentrates on its human component. Access to cars by young people in the greater Reykjavík area, and the shift in modal choice that occurs when they start driving, was investigated with a survey among high school students that yielded 553 answers. The results show that young residents in the capital area are fully aware of the costs of car-based automobility. Their near-universal move to cars when they enter driving age reflects the conditions of this regime. Yet they are also ambivalent about their position within the regime. While most previous studies of novice drivers have centred on road safety issues, this study shows the need to consider the cultural and social aspects of young people driving. This can lead to a deeper understanding of the modal shift that perpetuates carbased automobility, which is an important issue for transport planning.

© 2010 Elsevier Ltd. All rights reserved.

### 1. Introduction

"Car culture in Iceland is so extreme that people own more than one car, they do not walk anymore and never take the bus" (Male, 18 years old).

Iceland is among those countries where the use of the private car is most widespread. Young people are no exception. They seem to be fully aware of the opportunities rendered by the automobile, and their pervasive use of cars warrants a closer look. The situation in which they find themselves is an interesting case for research into transport issues and automobility.

The concept of automobility (Sheller and Urry, 2000; Urry, 2004) has been defined as a "patterned system which is predicated in the most fundamental sense on a combination of notion of autonomy and mobility" (Böhm et al., 2006, p. 4). It constitutes "a complex amalgam of interlocking machines, social practices and ways of dwelling", including "humans, machines, roads and other spaces, representations, regulatory institutions and a host of related businesses and infrastructural features" (Edensor, 2004, p. 102). This idea of a *system* has been critiqued as overly mechanistic: it overlooks the human choices that collectively produce automobility, and it avoids the politics inherent in its making (Böhm et al., 2006). Instead, the concept of a *regime* has been suggested, which serves to emphasise "the systemic aspect of automobility but also to bring out the relations of power that make this

system possible" (Böhm et al., 2006, p. 6). The concept of the regime of automobility hints at tensions and ambivalences experienced by the actors who sustain it through their practices.

The aim of this article is to investigate how individuals enter the regime of automobility. Their entry depends on their willingness to adopt the values and practices associated with this regime; to internalise its embodied "ideals of freedom, privacy, movement, progress and autonomy" (Böhm et al., 2006, p. 3). Instead of looking at the systemic nature of the regime of automobility, this article opts for a more social and cultural approach and hopes to bring new perspectives on automobility that add to the understanding of its nature. Focusing on the entry of individuals into the regime highlights a particular moment where individuals reflect upon their own personal mobile experience and its conditions. Previous research has not focused strongly on this aspect. Although some authors have worked with social and cultural aspects of automobility (e.g. Sheller and Urry, 2000; Dant, 2004; Sheller, 2004; Thrift, 2004), their research has focused on the human body and its association with the car.

A considerable corpus of literature exists about young drivers. Previous academic studies have for example focused on modal choices (Müller et al., 2008) and various safety issues, such as driving experience (McKnight and McKnight, 2003), risk perception (Machin and Sankey, 2008; Deery, 1999), vehicle choice (Hellinga et al., 2007), young driver mortality rate and driver licensing systems (Kingham et al., 2008), minimum driver licence age (Kingham et al., 2004), and predispositions for road incivility (Wilson et al., 2006; Bianchi and Summala, 2003; Ferguson et al., 2001). This research has highlighted the higher exposure of young people to

<sup>\*</sup> Corresponding author. Tel.: +354 6097541/+354 525 4379; fax: +354 525 4499. E-mail addresses: vrc1@hi.is (V. Collin-Lange), kben@hi.is (K. Benediktsson).

traffic accidents and the multiple factors that cause this. Inexperience, hazard and risk perception, vehicle choice, and what has been called the "genetics of driving" (Bianchi and Summala, 2003, p. 1), have been identified as the most common factors. 'Genetics of driving' refers to the driving history of the parents, that has turned out to be a key factor in shaping the future of young people as drivers (Wilson et al., 2006; Ferguson et al., 2001). An OECD synthesis report on young drivers published some years ago summed up the findings within the field and made several recommendations on the matter (OECD/ECMT Transport Research Centre, 2006). While this report is highly focused on licensing, accident and risk exposure of young drivers, it also opens up for new considerations, such as the importance of diversified modal choice possibilities.

Some work has also been carried out in Iceland in this field. Briem et al. (2004) looked at psychological factors in car accidents among young drivers and found that the psychological environment of young people is more important than age and gender in shaping their future driving life. They point out that those individuals involved in road incivilities such as overspeeding, traffic violations and related accidents tend to have the same profile. They also mention an improvement of methodologies and teaching techniques in Iceland and link it to a reduction of traffic accidents among young people. Mogensen et al. (2000) showed that the role of the parents and friends is very important for driving behaviour. Another study (Rannsóknir og Greining, 2004) found that the social environment affects the behaviour of young drivers. There were great differences in the behaviour of novice drivers depending on whether they were driving with family members or with friends. This study also concluded that most driving incivilities are part of games that usually involve the driver and his/her friends. Most existing research is thus about the road behaviour of young people. The reasons behind car ownership and use among young people are seldom addressed. The current study centres on these issues.

### 2. The context

As was indicated at the beginning of the paper, car ownership is very common in Iceland. In 2006, the country ranked number two internationally for the number of cars per 1000 inhabitants. An economic boom which started with the new millennium resulted in a considerable increase in the registration of new vehicles. During this period the banks lent money profusely to just about anyone for the purpose of buying new cars. The boom ended abruptly in October 2008 when the national economy crashlanded. While car imports were more or less suspended following these events, the country maintains its high ranking for car ownership. On the 31st of December 2008 there were no fewer than 657 cars per 1000 people in Iceland (Hagstofa Íslands, 2009).

At the end of 2008, there were 209,740 passenger cars registered in Iceland (Table 1). Including vans, trucks, lorries and buses, the total number of motor vehicles was 243,516 for a population of 319,756 (Hagstofa Íslands, 2008). In 2008, they were 225,777 people aged between 17 and 75 years of age. Nine out of every 10 people in this age group do have a driver licence and the figure for car ownership is similar. These figures suggest a pervasive culture of car ownership and use.

Table 1
Cars and driver licences in Iceland in 2008. Source: Hagstofa Íslands, 2008.

Cars* per 1000 inhabitants	657
Cars per 1000 inhabitants aged 17-75**	929
Driver licences per 1000 inhabitants aged 17-75	903

<sup>\*</sup> Up to 8 passengers, including jeeps

The reasons for the importance of car use are partially related to the country's geography and history. No railways, were built in Iceland, due to the sparse population and difficult terrain and particular effort has been put on bus transport systems. The car replaced the horse in the last century as the main means of mobility. Urbanisation occurred comparatively late, but today, about two-thirds of the population live in the Greater Reykjavík area. The capital's inhabitants seem to have simply transposed their countryside transport habits to the city. Space was not until recently considered as a scarce resource. Land use planning in the 1960s privileged the car as a main mode of transport. This resulted in a sprawling capital area.

A comprehensive master plan for the city of Reykjavík, covering the period 1962–1983, was decisive for establishing the hegemony of car transportation (Reykjavíkurborg, 1966). As Reynarsson has pointed out, "the main assumptions of the 1962 plan was that every household should have its own automobile. This became the case." (Reynarsson, 1999, p. 12). Influenced by modernist planning ideas of the postwar era, the Danish experts who completed the plan developed "an American-based traffic modelling (CAST) scheme" (Reynarsson, 1999, p. 19) for the city. Other municipalities also started to use this master plan as a model, and likewise developed a transportation system dominated by private motoring.

Recently, city planners and others have begun to acknowledge the limitations of the city's traffic system. Traffic jams, accidents, noise and air pollution have become issues of concern, along with the large proportion of space allocated to the car system. Recent master plans have addressed this in very general terms (Borgarskipulag Reykjavíkur, 1988; Borgarskipulag Reykjavíkur, 1997; Reykjavíkurborg Skipulag og byggingarsvið, 2001) but in practice there has been little change to the overall transportation pattern in the city.

### 3. The survey

For data collection, a questionnaire was prepared and submitted to students at high schools in the greater Reykjavík area. In Iceland, most students enter high schools at the age of 16 and leave at age 20. As the survey was concerned with novice drivers, the lower age of the respondents was set at 16, which is also the legal age to start driving school, and the upper age limit at 21. The aim of the questionnaire was to collect data about the relationship between young Icelanders and the automobile, and to capture their opinions about driving. The survey was distributed in randomly selected classrooms in seven high schools of the capital area. Some of those were located in the city centre, whereas others were in the suburbs. The profile of the schools is varied. Some have a vocational or technical component, whereas others offer general preparation for University studies without a specific vocational emphasis (Fig. 1).

A major part of the questionnaire was intended to collect quantitative data, such as the extent of driver licences and car ownership, distances and duration of travel between home and school, and the frequency of car use during the week. The questionnaire also included several supplementary qualitative questions that allowed for personal reflections and comments. For example, if people reported that they had a car, they were also asked to reflect verbally on why they had it. The respondents were also asked to agree or disagree with several statements related to car use and road safety. The final part of the questionnaire was an open invitation to comment on cars and driving in general. The respondents could write freely about their own experiences and opinions.

The questionnaire was answered by 553 young people, including 304 females, which represent 54% of the respondents, and 249 males or about 45%. In general, the quantitative results do not show noticeable gender differences. This might seem odd, as many studies have shown considerable differences between young

<sup>\*\*</sup> Minimum age of driver licence is 17. After age 75, drivers have to renew their licence annually.

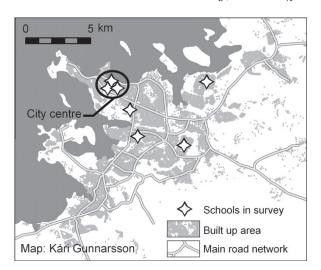


Fig. 1. Location of schools included in the survey.

males and females regarding car ownership and use, but it should be noted that Iceland is a country of relatively high gender equality. In 2007, the country was ranked fourth in the Global Gender Gap Index (World Economic Forum, 2007). Nevertheless, some differences do exist regarding attitudes and opinions about cars and driving (see Table 9).

It took on average around 10–15 min for the respondents to answer the questionnaire. Some of the questions appeared to be more difficult, such as the question which concerned the distance between home and school. Many respondents had to ask their fellow students, their teacher, or the authors about distances. It appeared that, before asking, many had a tendency to overestimate the distance. Many used the opportunity to write some final comments, which took considerable time for those who had much to say about their cars, the relationship that they had with them, the driving experience, and road safety.

### 4. Results

### 4.1. Driving licence and modal choices

The majority of the respondents have obtained a driver licence (Table 2), including a few who have lost it again having committed

**Table 2** Holding of driver licences.

	n	%
Does have a driving licence	320	57.8
Had a driving licence, but lost it	5	0.9
Intending to get a driving licence soon	218	39.5
Not interested in having a driving licence	10	1.8
Total	553	100.0

some traffic offences. Nearly two of every five did not have a licence when they were answering the questionnaire, but were intending to acquire their licence very soon and were either already attending driving school or intending to do so soon. Finally, less than 2% of the respondents neither had a driver licence nor had any interest in obtaining one.

The car is the first modal choice for the trip between home and school. Almost two out of every three students use the car for their school journey, including both those who drive themselves and those who get a lift with others, e.g. parents (Table 3). In comparison, only a quarter make use of public transportation, one in eight walks to school, and only a few ride a bike. In order to get a fuller picture of the modal shift, those respondents who had a driver licence were asked what had been their mode of transport before they obtained it. The answers indicate that nearly 40% had then been taking the bus, a little fewer were getting a lift with others, and about one out of every four walked to school. These results are interesting when compared with the modal choice after the acquisition of the driver licence. First, they show that the car is an important mode of transport even before the acquisition of the driver licence. Second, it is clear that bus use drops dramatically with the acquisition of the licence. The bus is the most common mode of transport before, but barely a tenth of the respondents continued to take the bus having gotten the licence to drive. The same applies to walking. As soon these young people get their driver licence, their modal choice changes in favour of the car.

### 4.2. Car access and ownership

Concerning car access and ownership (Table 4), it is noticeable that nearly three out of every five respondents own their own cars, including even some of those who do not have a driver licence. For example, 4% of the 16-year old in the sample own a car. Looking at the reasons for car ownership was one of the goals of the survey.

The answers to the qualitative question: "Why do you own a car?" are interesting. They can be divided into four types, which are not mutually exclusive. These will now be outlined. Figures are given in parentheses in order to give an idea of the relative weight of each type.

The most common reason stated for car ownership is simply "to go from place A to place B" (60%) Many respondents noted that they were just stating the obvious. Several people in this group even stated that this question was stupid, as the answer was evident. The second group concerns the allegedly inefficient public

**Table 4**Car access and ownership.

	Own car		Parent	's car	No o	ar	Total
	n	%	n	%	n	%	
Those with a driver licence Those without a licence	197 28	62 41	109 14	35 21	9 26	3 38	315 68
Total	229	59	123	32	39	9	391

**Table 3**Modal choices for the trip between home and school.

	Drive se	lf	Get a lift		Bus		Bike		Walk		Total
	n	%	n	%	n	%	n	%	n	%	
All respondents	219	40.0	132	23.5	131	23.7	3	0.5	88	12.3	540
Those with a driver	licence										
Before	-	-	138	36.2	145	38.4	7	1.8	89	23.4	379
After	214	67.0	48	15.0	30	9.4	0	0	27	8.4	319

**Table 5**Distance between home and school.

Distance home-school	<1 km	1	1–5 km	1	6-10 k	m	11-1	5 km	16-20	) km	>20 k	m	Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All respondents	63	11.6	185	34.0	173	31.8	71	13.0	26	4.8	27	5.0	545	100.0

**Table 6**Modal choice and distance between home and school.

	<1 km	1	1–5 km	1	6-10 k	m	11-15	km	16-20	) km	>20 k	m	Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Drive self	19	30.2	66	35.7	75	43.4	32	45.1	13	50.0	9	33.3	214	39.3
Get a lift	9	14.3	45	24.3	49	28.3	17	23.9	4	15.4	8	29.6	132	24.2
Take the bus	0	0	41	22.2	47	27.2	22	31.0	9	34.6	10	37.0	129	23.7
Bike	1	1.6	2	1.1	0	0	0	0	0	0	0	0	3	0.6
Walk	34	54.0	31	16.8	2	1.2	0	0	0	0	0	0	67	12.3
Total	63	100.0	185	100.0	173	100.0	71	100.0	26	100.0	27	100.0	545	100.0
Total cars	28	44.4	111	60.0	124	71.7	49	69.0	17	65.4	17	63.0	346	63.5

transport system in Reykjavík. Many answers explained that the timetable and frequency were inadequate (15%). They also declared that using the bus to go from one place to another was difficult because of the planning of the bus routes. In the third group of answers, the pleasure, enjoyment and emotional satisfaction of owning a car and driving it is emphasised (12%). Included in this group are those who describe the car as a plaything, or even as a tool with which to challenge the police and others. Finally, the fourth group includes those who described that owning a car is, for young people, a synonym for freedom, independence, autonomy and increased potential for mobility (9%). In this same group, several former bus riders explicated how obtaining a car had been for them a way to simplify their life.

### 4.3. The distance between home and school

As explained above, the schools were located in various parts of the capital area. They were the centre of this study and not the city centre of Reykjavík. That is why we considered the distance between home and school and not home and the city centre of Reykiavík. Some of schools are in the city centre or in close vicinity and some are in the suburbs of Reykjavík or adjacent municipalities. The location of the school does not make any significant difference to the responses. The students at high schools are not obliged to go to the closest one, but can apply to the school that corresponds to their educational intentions. One question focused on the distance between home and school. It appears that the largest group of students - more than a third - live between 1 and 5 km from school (Table 5). The second largest group resides 6-10 km from their school. Somewhat more than a tenth of the respondents live 1 km from school or closer. More than half of those choose to walk to school (see Table 6). Very few of those living less than 1 km from school choose to use a bicycle.

The results show that, beyond 1 km or so, distance between home and school is not a factor in modal choice for the home-school trip. Young Icelanders mostly use private motoring as their main transport mode – no fewer than 63.5% of all respondents use cars for their journey between home and school (as drivers or as passengers). Only in two distance categories is the car not the main transportation mode. People living within 1 km choose to walk to and from school. Respondents living at a distance greater than 20 km take the bus (Table 6). The number of people taking public transport buses increase with the augmentation of distance between home and school. It seems that the further respondents live away from

Table 7
Three main destinations.

	1st rank		2nd ra	ınk	3rd ra	nk
	n	%	n	%	n	%
School	272	61.5	45	10.3	19	4.3
Shopping mall	8	1.8	26	5.9	26	5.9
Grocery store	7	1.6	17	3.9	45	10.3
Friends' home	52	11.8	73	16.7	59	13.4
Sport	42	9.5	76	17.4	41	9.3
Workplace	22	5.0	89	20.4	87	19.4
Downtown	6	1.4	22	5.0	20	4.6
Family	1	0.2	23	5.3	40	9.1
Diverse activities	15	3.4	49	11.2	83	18.9
Other	17	3.8	22	5.0	22	5.5
Total	442	100.0	442	100.0	442	100.0

school, the more they take the bus. The bus is the most important transport mode for people living more than 20 km from school. The car only ranks second for this category. This is due to the fact that public transport in Reykjavik charges flat fares irrespective of distance. Therefore it is financially advantageous for those people to take the bus rather than driving themselves. This pricing system appears to affect the people living at a distance less than 1 km from school, as none of them takes the bus to go to school. Only three persons out of 545 indicate that they bike to school, which seems to be very low. Bicycle use is limited in Reykjavík for a number of reasons (Reykjavíkurborg, 2010). Weather and topography are often mentioned as hindrances, but these natural conditions are in fact not very limiting. Infrastructure for bicycles is lacking however and cyclists are generally forced to use the sidewalks. In addition to this, cyclists also seem to have a hard time coping with cars when they are on the road. The reasons for low bicycle use thus seem to be related to planning and general attitudes.

### 4.4. Most common destinations

The respondents using a car were asked to list the three places that were their most common destinations, ranked by the frequency of trips. Ten destinations were proposed beforehand (Table 7). If they chose "other destination" the respondents were asked to explain.

The three main destinations are 'school', 'workplace' and 'diverse activities'. Explanations of these choices were made in some

cases in response to the last question of the survey. These three most common destinations are closely followed by 'sport' and 'visiting friends'. Answers regarding the category 'other' also gave valuable information. Some choosing this category as one of their principal destinations specified the *rúntur*, which is the Icelandic version of car cruising.

About 45% of the respondents listed the workplace as one of their three main destinations (see Table 7). It is indeed common for Icelandic students to have a part-time job while studying. In 2007, 73.1% of students aged between the 16 and 24 had a job (Hagstofa Íslands, 2010). However, none of the respondents said that they were working because of financial necessity. It should be recalled that the survey was undertaken in 2007, when the Icelandic economy was booming. Several of those who mentioned the workplace said they were working in order to be able to afford their car. For example, one of the comments was: "It is important to own a car but the petrol is always so expensive and you have to work hard for it. You are tired after a working day and it has consequences when you go back to school" (male, 18 years old). While the respondent stressed the importance of owning a car, he also pointed to the consequences of working while at school.

The car gives those young people the opportunity to cope with their personal activities, like going to school, to do sports, pursuing their interests in music, and visiting friends. They also use it much in certain other contexts, such as that of the *rúntur*: it is a social tool.

#### 4.5. Car cruising: the runtur

Car cruising can be defined as driving in a specific area for an extended period without a specific purpose (Best, 2006, p. 198). It differs from regular driving as the goal is not to go anywhere in particular, but eventually to be seen by others. There is usually a popular route (a strip) along which most cruisers will drive slowly, bumper-to-bumper, through town. The Icelandic rúntur is a local form of this phenomenon. Almost any driver in Iceland has (literally) been down this path at some stage in his/her driving life. It is an important phenomenon in many towns in Iceland. Young people consider this as a way to express their newlyacquired freedom afforded by the driver licence, but also to have a glimpse of city centre nightlife that they are not supposed to have access to because of their age. The legal drinking age in Iceland is 21, which restricts access to bars and clubs to anyone under this age. In the survey, several people directly mentioned the rúntur in their answers about their reason for car ownership. Knowing the importance of this phenomenon for young people, three questions about it were included in the questionnaire. In the first of these, the participants were asked directly whether they took part in the rúntur. No less than a third of them do so on a regular basis. The second question was whether they were doing this alone or as part of a group. Nine out of ten said they went cruising with friends, and very few reported that they went cruising alone (Table 8).

Table 8 Car cruising.

	n	%
All respondents		
Do go cruising	414	77.2
Do not go cruising	122	22.8
Total	536	100.0
Those who go cruising		
With friends	400	96.6
Alone	14	3.3
Total	414	100.0

The third question was "Why do you go cruising?" The respondents could write their own answers, many of which added to the understanding of reasons behind car ownership. Below, these answers are grouped into three distinct categories. Figures are given in parentheses in order to give an idea of their relative importance.

First, many respondents emphasise the pleasure and fun of the *rúntur* and of driving more generally (64%). This pleasure must be shared. That is why friends are important when going cruising. Chatting is part of the fun, and being on the *rúntur* gives the opportunity to talk about important matters with friends. In this category, I also put those who describe the enjoyment of speeding, daring and making fun of the "fat cops", to use the words of some respondents.

The second category includes those who stated that they went car cruising because they had nowhere to go and nothing to do on weekend evenings, and they were just killing time by driving (21%). They explain that there is no fun staying at home on weekend nights, and that because they do not want to be at home with their parents or at their friends' parents, they take the car and go for a ride downtown.

The third category of answers depicts the *rúntur* as a social and technological experience (15%). For the social part, cruising is a way to experience and participate in the weekend nightlife. Many respondents explain that they go cruising simply in order to watch the city centre and the people there. The *rúntur* is like a field trip; a social learning experience. As for the previous category, friends are important, but even more important are potential encounters: other friends and relatives, and most importantly, potential sexual partners. Many boys explain that they go cruising to meet and pick up girls. Some girls also mention the possibility to meet boys while cruising.

Cruising is also a technological experience; a way to strengthen the connection of the young driver to his/her machine and to improve skills and abilities, such as gear changes in slow traffic.

### 4.6. Opinions about cars and transport

In the last question before the 'free expression' part of the questionnaire, the respondents were asked about their degree of agreement with several statements (Table 9). The questions were divided into two different types; first, general statements about the car, driving and road safety; and second, personal statements, for instance "I am using the car too much". The paper draws attention to the general conclusions but does not review all statements in detail. No significant differences have been found in the quantitative results between males and females in terms of car use and ownership. Gender differences are noticeable however in the relationship with cars and attitudes toward driving.

Young people are aware of the costs associated with car ownership and use. No fewer than 89% agree or strongly agree with the statement that cars are expensive to maintain. Nearly 58% of them agree that there are too many cars in Iceland but only 44% of them disagree or strongly disagree that they are using their car too much. One curious thing is that males do acknowledge more that they use their car too much than female, but when asked about the fact that a car is just a way to go between places, they are more inclined to disagree with the statement.

The majority of respondents also acknowledge the responsibilities accompanying the automobile. Only 21% of them agree with the statement that it is in order to drive over the speed limit and 56% disagree or strongly disagree with that statement (23% neither agree nor disagree). Furthermore, 54% think that the police should be more strict with drivers. Gender differences appeared in these statements. Young males seem to be more inclined to drive over the speed limit and disagree with the fact that the police should be stricter. The last figure which I want to comment on is that

**Table 9**Opinions about cars and driving.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
"There are too many cars in Iceland" (**)	23.4	34.5	31.6	6.3	4.2
"I am using my car too much" (***)	4.7	13.0	38.0	24.4	19.9
"Cars are expensive to maintain"	59.4	29.5	8.4	1.8	0.9
"It is ok to drive over the speed limit" (***)	4.0	17.2	23.8	30.7	24.3
"It is important to have a driver licence"	60.0	24.7	10.8	2.2	2.3
"Car gives you freedom"	40.7	38.7	17.0	2.1	1.5
"Owning a car makes me independent"	40.9	28.6	21.0	6.0	3.5
"I feel independent when I drive a car"	22.0	32.1	35.7	6.3	3.9
"It is important what kind of car you drive" (***)	20.5	30.5	25.0	13.6	10.4
"The public transport is bad"	35.8	16.2	18.4	15.8	13.8
"The car is just a way to travel between places" (***)	23.9	41.0	12.6	15.3	7.2
"It is important to own a car"	21.4	37.9	24.0	12.9	3.8
"People of my age who owns car are more cool"	6.1	6.3	25.5	21.0	40.0
"Most accidents are the driver's own fault"	33.3	39.5	22.2	3.2	1.6
"The police should be more strict with drivers" (**)	22.2	31.8	35.2	5.8	5.0

The numbers show the percent of responses to each statement. In the statements marked with \*, \*\* and \*\*\* there is significant difference in answers between males and females (Chi-Square test).

52% of the respondents strongly agreed or agreed with the statement that the public transport system in Reykjavík is bad. This last statement has been explained in detail in the respondents' answers to the open question.

The personal statements provide important information about the feelings of young drivers about driving: Some 85% strongly agree or agree that it is important for them to have a driver licence and 60% consider that it is important to own a car. A noticeable gender difference can be found on some of the personal reasons behind car ownership. Looking in detail to the number from the statement "it is important what kind of car you drive" shows that young males put more importance on the type of car they own than young females do. The same differences between males and females can be found in the statement "The car is just a way to travel between places". Females do much more agree with this statement than males which, is logical as they seem to attach more values to cars.

Concerning an even more personal statement, 54% agree or strongly agree that they feel independent because of the car. Additionally, 70% strongly agree or agree that personal car ownership gives them independence, and 69% strongly agree or agree that the car gives them freedom.

The last part of the questionnaire gave the respondents the opportunity to write anything they wanted about cars and driving. The answers were prolific and varied, showing that young people have much to say about these issues. There are some general traits and thematic concerns, such as the gain in potential freedom and mobility; the necessity to have a car in modern life; the relief to finally have the driver licence and/or a car; the importance of car cruising; and general affection for the car. But perhaps the most surprising recurring comments are those that reflect these young people's concerns with safety.

First of all, some respondents claimed that too much focus was put on young people in terms of traffic safety measures and police controls. Some described how some aged drivers and owners of big jeeps were all the time committing driving incivilities and getting away with it, even when the police witnessed it. Many had strong thoughts on the subject: "The police should be more strict with drivers who drive recklessly" (female, 19 years old) or "I think that policemen should be more dedicated to seize driver licences. There are too many stupid people that should not be driving out there" (male, 18 years old). The respondents acknowledge the fact that they might be young and inexperienced on the road, but they at

least know the traffic rules - rules that are, according to them, easily forgotten by older and more experienced drivers. Many of them explain that it would be beneficial to raise the age of the driver licence to 18 years and say that they feel that at 17 one is a bit too young and not ready to drive. Incidentally, these thoughts on safety concur with a recommendation of the OECD report that was mentioned above, about the raising of the driving age (OECD/ECMT Transport Research Centre, 2006) and shows that if the measure was ever taken in Iceland, it might not be as unpopular as could be assumed. Some of the respondents explained that they are cautious because they are novices, and point out that after 10 years of driving experience people start to be less careful, especially if they own a big car or a jeep. Many of them gave the example of their parents and even in some cases denounced their bad road behaviour. Some of them even suggested that drivers should retake the theoretical driving test at least every 5 years in order to refresh their knowledge: "It would be nice to renew the driver licence more than one time and not only after the first 2 years or when people get too old to drive. People very rapidly forget traffic rules" (male, 19 year old). Those statements indicate a concern that contrasts with the image of young drivers given by previous studies, especially those concerning Icelandic novice drivers (Mogensen et al., 2000; Briem et al., 2004).

### 5. Discussion

The objective of this paper was to investigate how individuals enter the regime of automobility. This has been done through an analysis of young people in Reykjavík, Iceland. Their entry into the regime exposes a particular moment where individuals consider their own personal mobile experience and its conditions. In addition to this, it is consistent with Beckmann's description of the ambivalent nature of automobility and the car which "simultaneously enables and disables, individualizes and reintegrates, liberates its users from one auto-centred spatio-temporality and coerces them into another" (2004, p. 83). Their entry also casts light on the tensions present in the regime (cf. Böhm et al., 2006) and opens up new perspectives on young drivers and automobility.

First, it must be noted that young people approach car use and ownership from a very practical perspective. Their goal is generally a mundane one – to be able to travel from A to B in the most efficient way possible. As many other studies of modal choice have

<sup>\*</sup> p < 0.05.

<sup>\*\*</sup> p < 0.01.

<sup>\*\*\*</sup> p < 0.001.

shown, this is conditioned by numerous factors, both personal and structural (age, gender, work, geographical location, availability of transport, planning, etc.). In the situation in which the young people find themselves, the car simply offers them the best opportunity to be autonomous and mobile. Other transport modes are currently left aside as they do not fulfil the practical requirements. It might seem that car use is an obligation of sorts within this age group, but this does not mean that options other than the car are not available. Most of the respondents had been bus users before starting to drive and many of them harshly condemned the public transport system of Reykjavík for its inefficiency. In their answers from the open question, they pointed out that the routes were inadequate, as many buses go the same route. They also criticized the timetables and the fact that buses only show up every 20 min. and every half an hour after 6 o'clock in the evening. Even worse, some people explain that the driving styles of the drivers were dangerous. All this seems to make their daily usage of public transport difficult. Most of the respondents state that they have switched from one transport mode to another because the previous one was not sufficient for them anymore.

Their criticisms are also focused on their own car use and their place within the regime. Many point out that they think that there are too many cars in Iceland; that people, including themselves, are using them too much; and that too many people are driving alone. They say they want to change this situation and even propose certain solutions, e.g. car pooling and radical improvements to the public transport system. This seems to open up a possibility for other expressions of automobility than its current car-based one.

Even if they are avid participants in the regime of automobility, young people are somewhat concerned with how the regime expresses itself. This is based on two things; first, their own position within the regime, and second, their own personal mobile experiences. They are very conscious of the position they occupy in the regime. Their comments concerning road safety, for example, highlight this. They see themselves as a group of individuals who are subjected to special surveillance; who have to prove that they do have the right to be part of the regime, even if they have a driver licence. They contest the sometimes paternalistic methods conditioning their normalisation as proper and civilised drivers. The regime of automobility is based upon certain power relations that are inherent to the maintenance of the system (cf. Böhm et al., 2006). It is exclusive, even with regard to its own actors, and all drivers are not equal. Their comments also show the limitations of road safety studies and campaigns in Iceland and probably in some other contexts, insofar as there may be too much focus on young drivers and not enough on others. The demand for stricter rules and police by the majority of novice drivers seems to be a call for a more responsible automobility and for more equality within the regime; equality that might both improve the safety of all and its efficiency.

Second, car ownership and use in Iceland is more than pure practicality. It is also symptomatic of the social and cultural aspects involved in the production and reproduction of the regime of automobility. The relationship that young Icelanders have with the car goes beyond simple transportation purposes as cars are also used extensively as tools for social interaction. The *rúntur* car cruising phenomenon is an occasion for encounters. Participation in the *rúntur* is an example of social and cultural significance of automobility, as it is a part of the driver's history and identity. The *rúntur* is just of the many instances of social and cultural significance surrounding the car. In this context, the social and cultural positioning towards car culture and automobility is similar to for example the *raggare* phenomenon in Sweden (O'Dell in Miller, 2001), even if the latter is more of a specific subculture in that country.

As Sheller has stated, "cars elicit a wide range of feelings" (2004, p. 1). These feelings are attached to certain socially and culturally produced values. When opting to use a car, young people reinforce

a whole set of values that have been transposed onto the car by the current regime of automobility. When asked why they owned a car, many of them mentioned "freedom". Cars are represented as the epitome of freedom, autonomy and mobility (cf. Sheller and Urry, 2000; Urry, 2004; Edensor, 2004). It could be claimed that young people are simply reproducing, socially and culturally, behaviour that they do observe from their parents and peers; that their entry into the regime of automobility is socially and culturally conditioned in a systematic way long before it happens. A parallel could be drawn with the idea of Bianchi and Summala about the "genetics of driving" (2003, p. 1). This idea should not only concern road incivility, but could also be used to investigate the social and cultural aspects of the systemic nature of automobility and the realities underwriting modal choice.

As mentioned above, the young drivers occupy an ambivalent position. They are on one hand practical when it comes to car use and ownership, but on the other hand they are eager practitioners of car-based automobility. Additionally, their position as newcomers or novice drivers gives us a chance for a better understanding of automobility. Most studies of young drivers have mainly focused on their accident rates, analysed road incivility and stressed their inexperience (Deery, 1999; McKnight and McKnight, 2003; Wilson et al., 2006; Hellinga et al., 2007; Machin and Sankey, 2008; Müller et al., 2008; Kingham et al., 2008). The goals have generally been to find ways to improve road safety. They have looked at ways of improving car transportation by making it safer for all its users, which is an honourable cause. However, those studies have mostly focused on ways to reinforce an exclusively car-oriented form of automobility. They have highlighted some of the weaknesses by pointing at young people as allegedly failing actors in the car system; yet they have left unaddressed the question of the pervasiveness of car culture in itself and the inherent social and cultural dynamics involved in the making of the regime of automobility.

#### 6. Conclusions

The results from the survey showed that important information can be obtained by looking at the modal choices of young people. As shown in this paper, approaching their driving habits from a social and cultural point of view is fruitful. Redshaw (2008) has claimed that social and cultural factors need to be considered much more intensively, so that their importance can be factored into education and planning. Such information could be used to improve the car system in itself or even help to develop other transport alternatives. Because of their ambivalent position as newcomers and their shift from one transport mode to another, novice drivers represent an opportunity to learn about past, present and future mobilities. More research should be done on novice drivers and their mobile experiences. Such research has practical significance for assessing the efficiency of transport systems, by looking at why young people leave one transport mode for another and what they do expect for their future modal choices. Looking at those issues could lead to a reconsideration of the current regime of automobility and maybe help to develop other forms.

#### Acknowledgements

The authors would like to thank Tim Richardson and Edward H. Huijbens for their comments, the two anonymous reviewers for their valuable points and Kári Gunnarsson for the map. Virgile Collin-Lange wants to specially thank Gunnar Thorarensen for his support.

#### References

- Best, A.L., 2006. Fast Cars, Cool Rides: The Accelerating World of Youth and Their Cars. New York University Press, New York & London. Bianchi, A., Summala, H., 2003. The "genetic" of driving behavior parents' driving
- style predicts their children's driving style. Accident Analysis & Prevention, 655-659.
- Böhm, S., Jones, C., Land, C., Paterson, M., 2006. Against Automobility. Wiley-Blackwell.
- Borgarskipulag Reykjavíkur, 1997. Aðalskipulag Reykjavíkur 1996-2016. Borgaskipulag Reykjavíkur, 1988. Aðalskipulag Reykjavíkur 1984-2004
- Briem, V., Þórðarson, K., Ragnarsson, Á.Ó., 2004. Sálrænir þættir í umferðarslysum ungra ökumanna. Reykjavík, Umferðarstofa.
- Dant, T., 2004. The driver-car. Theory, Culture & Society 21 (4/5), 61–79 (60). Deery, H.A., 1999. Hazard and risk perception among young novice drivers. Journal
- of Safety Research 30, 225–236.
- Edensor, T., 2004. Automobility and national identity. Theory, Culture & Society 21 (4/5), 101–120.
- Ferguson, S.A., Williams, A.F., Chapline, J.F., Reinfurt, D.W., De Leonardis, D.M., 2001. Relationship of parent driving record to the driving records of their children. Accident Analysis & Prevention 33, 229–234.
- Hagstofa Íslands, 2008. Mannfjöldi 1. janúar 2008 (Population 1 January 2008). Hagtíðindi. Reykjavík, Hagstofa Íslands.
- Hagstofa Íslands, 2010. Námsmenn Atvinnuþátttaka, atvinnuleysi, vinnutími og fjöldi starfandi eftir ársfjórðungum 2003–2010. Hagtíðindi. Hagstofa Íslands. Hausmann, R., et al., 2007. The Global Gender Gap Report 2007. Harvard University,
- Hausmann, R., et al., 2007. The Global Gender Gap Report 2007. Harvard University,
   University of Berkeley for World Economic Forum.
   Hellinga, L.A., Mccartt, A.T., Haire, E.R., 2007. Choice of teenagers' vehicules and views on vehicul safety: survey of parents of novice teenage drivers. Journal of Safety Research 38, 707–713.
   Hagstofa Íslands, 2009. Fólksbílar pr. 1000 íbúa/Inhabitants per passenger car. Hagtíðindi. Hagstofa Íslands.
   Kingham, S., Zant, T., Johnston, D. 2004. The impact of the minimum driver.
- Kingham, S., Zant, T., Johnston, D., 2004. The impact of the minimum driver licensing age on mobility in New Zealand. Journal of Transport Geography 12, 301-314.

- Kingham, S., Pearce, J., Dorling, D., Faulk, M., 2008. The impact of the graduated driver licence scheme on road traffic accident youth mortality in New Zealand. Journal of Transport Geography 16, 134–141. Machin, M.A., Sankey, K.S., 2008. Relationships between young drivers' personality
- characteristics, risk perceptions, and driving behaviour. Accident analysis & prevention 40 (2), 541–547.
- Mcknight, A.J., Mcknight, A.S., 2003. Young novice drivers: careless or clueless? Accident Analysis & Prevention 35, 921-925.
- Mogensen, Á., Sigvaldason, S., Jónsson, R., Baldursson, J., 2000. Ungir ökumenn: Yfirlit yfir ráðstafanir til að fækka slysum. Reykjavík, Rannsóknarnefnd Umferferðaslysa.
- Müller, S., Tscharaktschiew, S., Haase, K., 2008. Travel-to-school mode choice modelling and patterns of school choice in urban areas. Journal of Transport Geography 16, 342-357.
- O'Dell, Tom. Raggare and the Panic of Mobility: Modernity and Everyday Life in Sweden. In: Daniel Miller (Ed.). Car Culture. Oxford: Berg, 2001. OECD/ECMT Transport Research Centre, 2006. Young Drivers: The Road to Safety.
- Rannsóknir og Greining, 2004. Áhættulegðun ungra ökumanna: Niðustöður rannsóknar meðal framhaldsskólanemma á Íslandi. Reykjavik, Rannsóknir & Greining for Rannsóknarnefnd Umferðaslysa.
- Redshaw, S., 2008. In the Company of Cars: Driving as a Social and Cultural Practice.

   Human Factors in Road and Rail Transport, Ashgate Publishing Limited.
- Reykjavíkurborg, 1966. Aðalskipulag Reykajvíkur 1962-83.
- Reykjavíkurborg, 2010. Hjólaborgin Reykjavíkur
- Reykjavíkurborg Skipulag og byggingarsvið, 2001. Aðalskipulag Reykjavíkur 2001–
- Reynarsson, B., 1999. The planning of Reykjavík, Iceland: three ideological waves a historical overview. Planning Perspectives 14, 49–67.
- Sheller, M., 2004. Automotive emotions: feeling the car. Theory, Culture & Society 21 (4/5), 221–242.
- Sheller, M., Urry, J., 2000. The city and the car. International Journal of Urban and Regional Research 24.4, 737–757.
- Thrift, N., 2004. Driving in the city. Theory, Culture & Society 21 (4/5), 41-59.
- Urry, J., 2004. The "System" of automobility. Theory, Culture & Society 21 (4/5), 25–39. Wilson, R.J., Meckle, W., Wiggins, S., Cooper, P.J., 2006. Young driver risk in relation to parents' retrospective driving record. Journal of Safety Research 37, 325-332.

### Paper II

"My car is the best thing that ever happened to me": Automobility and novice drivers in Iceland

# "My car is the best thing that ever happened to me": Automobility and novice drivers in Iceland

Virgile Collin-Lange

(Resubmitted after revision to Young: Nordic Journal of Youth Research)

#### **Abstract**

This paper explores how car use of novice drivers impacts their perceptions of space and spatial practices. A survey submitted to Icelandic novice drivers and the author's personal experience of obtaining the drivers licence constitute the ground basis for this paper. In their responses, many of the young people who answered the survey pointed out that their car use was an adaptation to the conditions in which they found themselves: a pervasively car-oriented transport system. Their car use is also symptomatic of how they approach their own automobility and spatiality. The present paper concurs with current discussions of automobility and approaches it as a regime. The author argues, however, that one's integration into the regime of automobility is an expression of human territoriality. This paper also shows that automobility should be considered as phases during which one's individual motility is maximised according to the structural and social environments in which the individual finds him or herself. Finally this paper calls for a greater considerations about youth within the field of mobilities.

#### Keywords

Automobility, spatial practices, novice drivers, young people, cars, Iceland.

#### Introduction

"My car is the best thing that ever happened to me" (comment from a 16 year old female in Reykjavík, 2007)

When trying to understand automobility, young drivers are an interesting source of information. Young people in Iceland are no exception as they have to cope with the country's impressive car system, and navigate a hegemonic car culture. On the 31<sup>st</sup> of December 2009, the people of Iceland –319 000 – owned a little more than 210 000 passenger cars (Hagstofa Íslands, 2009). This represents 658 cars per 1000 inhabitants, the 2<sup>nd</sup> highest number in Europe, where the average is 448 cars per 1000 inhabitants (EEA, 1995 - 2009 Hagstofa Íslands, 2009). Counting only the inhabitants old enough to hold a driving licence, there are 0,97 motor vehicles per driver (Hagstofa Íslands, 2009). Those numbers speak of a surprisingly large car-oriented system for an urbanised country, where 2/3 of the population live in the Capital area. There are very few options for people to manoeuvre outside the car-based regime, also for young people and especially novice drivers. This is a very intense car-based planning solution and a car culture, similar to that which can be experienced in the USA.

The opening quote of this paper comes from a 16-year old female who took part in the survey on which this paper is based. This paper will look into the qualitative results from a survey submitted to 535 secondary grammar school students in the spring 2007. The aim of the survey was to collect data about young Icelanders and their automobiles and to capture their opinions about cars and driving. The quantitative results were presented in (Collin-Lange & Benediktsson, 2010) and will only be used to contextualize this paper. The opening quote could be my own, parallel to the surveying of novice drivers in Iceland; the author also went through the process of getting a driver license and starting to drive. The present paper is simultaneously based on a semi-autobiographical methodological approach echoing the new mobility paradigm of Büscher and Urry (2009).

When moving to Iceland in 2004, I was astonished by the level of car use. I did not have a driving licence or a car, and the first years I lived there, my mobile potential shred away and I found myself struggling in a transport system where city planning is almost exclusively oriented toward cars (Reynarsson, 1999) to the extent that non-car users seen as 'losers' (Sigmundsdóttir, 2009). In April 2007, I began taking driving lessons, getting my driving licence few months later at the age of 24. Getting the licence and shifting toward cars while doing the survey improved and deepened my understanding of my research subject.

The aims of this paper are twofold, first, it explores how young drivers in Iceland enter the system of automobility and what their entry tells us about the system of automobility. Secondly, it analyses how this process underlines the place that is given to cars? In other words, the paper hypothesizes that in the Icelandic society, the meanings given to cars and driving by young Icelanders reflect greater social and spatial aspirations.

This paper first addresses the question of automobility by considering its potential multiple forms and addresses the matter of space within the concept. Second, methods are presented. Third, the qualitative responses are confronted with my theoretical approach on automobility. Finally, the remainder of this paper interprets and discusses

the results in terms of automobility, space and young drivers. It particularly calls for a reconsidering young drivers' status of within automobility theory.

#### **Automobilities and space**

The concept of automobility refers to the individualised movement of persons through space by means of a particular form of technology (Urry, 1999, 2002a, 2002b, 2004; Featherstone, (2004). It has been presented as a *system* (Urry, 2004); "a complex amalgam of interlocking machines, social practices and ways of dwelling" (Sheller and Urry 2000, 739). Urry and Sheller's original formulation attempted to understand the car system beyond its technological aspects. They investigated how individuals structure this system. They underlined the infrastructural aspects which strengthen of the system of automobility such as its spaces, places, physical or institutional infrastructures.

The system of automobility is structured by "humans, machines, roads and other spaces, representations, regulatory institutions and a host of related businesses and infrastructural features' (Endensor, 2004, 102). The concept of automobility is today understood as a "patterned system which is predicated in the most fundamental sense on a combination of notion of autonomy and mobility" (Böhm et. al 2006a: 4). Questions of mobilities, like the ones related to automobility are "at the centre of constellations of power, the creation of identities and the microgeographies of everyday life." (Creswell, 2010: 551). On an individual level, automobility is about power, freedom, autonomy and emotional relations structuring of the system of automobility as Sheller stated (2004):

"that emotional relations between people are simply mediated or expressed through things [...] but that kinaesthetic investments [...] orient us toward the material affordances of the world around us in particular ways and these orientations generate emotional geographies" (Sheller, 2004: 228).

Automobility can be seen as an emotional cradle in which identities and geographies are formed.

This paper situates itself in relation to the work of Böhm et al. (2006), who presented automobility as a *regime*. Their work – based on the original definition of Sheller and Urry -, stresses the systemic and power components of the system of automobility and brings out "the relation of power that make this system possible" (Böhm, et al., 2006a: 6). They also highlight the simultaneously inclusive and exclusive nature of the system and lay emphasis on its impacts on both the social and spatial sphere which introduces a power relation between the individual and its surrounding space. Furthermore, Böhm et al. have criticised the centring of automobility around the car and declared that "there are automobilities that do not depend upon the car" (2006a: 6). Thus re-centres the debate on transport technologies, autonomy and mobility and showing that "the car is only a particular universality, a particular *regime* of automobility" (Böhm, et al., 2006a: 6).

Beyond offering a spatial potential cars give their users a certain social status and serve as indicators of personal taste (Carrabine and Longhurst, 2002), or are used in "a discursive context of sign values operating in codes of social status" (Dant, 1998: 92). Borden's (2001) observation that skateboards, used in specific contexts to create spaces favourable for socialisation, this is also true for cars. Cars act as "a social equalizer" but

also "provides any of its users generous amounts of personal space (...) while expanding opportunities for negotiating external space" (Rajan, 2006:14).

Silverstone (1994: 127) showed how the introduction of television led to the reorganisation of the living room in homes. The cars caused a similar spatial reorganisation. They imply "spatial infrastructural and institutional moorings" (Hannam, Sheller, & Urry, 2006: 3) which encompass 'territorialisations' of mobility. Cars and driving also show the importance of movement and mobility in place- and space-making processes (see for example Creswell, 2006; Low, 2003; Urry, 2000). The moorings constitute territories that configure and enable mobilities, and vice versa.

Automobility can be considered as an expression of human territoriality; a way to "conquer" territories. Human territoriality is defined as "the attempt by an individual or group to affect, influence, or control people, phenomena, and relationships by delimitating and asserting control over a geographic area. This area will be called the territory" (Sack, 1986: 19, emphasis original). Territories are a projection of intertwined, appropriated and ideological spaces and places. Human territoriality creates a relational bond between individuals, spaces and places. It is a form of spatiality (Agnew, 2007), which produces territories. Territoriality acts as background of human spatial relations and go beyond simply having control over the territory's physical delimitation; it also acts upon social aspects. One's quest to be automobile could be considered as a tactic (De Certeau, 1984) to access, control or influence territories. This quest completes the way Böhm et al. approached automobility (2006a) and highlights the spatiality of the power relations of the regime of automobility. It shows the modus operandi of automobility and its social and spatial logic. Individuals socially and spatially include themself within the regime and perpetuate it socially and spatially. They contribute to expansion of the regime toward new territories, both beneficial for the regime and the individuals.

Being *automobile* gives the opportunity to create, stabilise and enhance one's social and spatial potential. Paraphrasing Skeggs (in Sheller & Urry, 2006: 211; Skeggs, 2004), automobility reflects and reinforces power between into "those who have the means to be mobile and thereby be part of the space of flow and those who do not" (Fotel & Thomsen, 2004:536). It produces spaces and places that have the potential to decide about inclusion or exclusion (cf. Jain & Guiver, 2001, on cars, environmental problems and social exclusion).

The concept of motility "defines the capacity of entities (e.g. goods, information or persons) to be mobile in social and geographical spaces" (Kaufmann, Bergman, & Joye, 2004: 750). It is the "way in which individuals or groups take possession of the realm of possibilities of mobility" (Flamm & Kaufmann, 2004: 3). It describes the potential for mobility in given spaces (Flamm & Kaufmann, 2004; Freudendal-Pedersen, 2007). Motility demonstrates how "access, competences and appropriation are moderated and conditioned by different spaces" (Kaufmann, et al., 2004:752) around different transport technologies. However, motility is more than the capacity for moving through and accessing social and geographical spaces: it is the possibility to durably affect those spaces. Motility represents a form of capital (Kaufmann, et al., 2004:752) that can be realised by actors, for instance by taking a driving lesson.

I argue that automobility should be understood as stages in which one's individual motility is maximised – where one can be *automobile* – according to the structural, personal and cultural context in which this individual finds him/herself. Each of these stages is centred on one particular mobile technology, individuals can switch between

them, each giving individuals access to certain spaces. This switch is influenced by one's motility and each stage of automobility represents a certain expression of territoriality. It is a way to access, control and territorialize the different spaces and places rendered by the various stages, and bring new ones under subjection.

#### **Automobility and youth**

As explained above, automobility originally defines the mobility of individuals by a particular transportation mean: the car (Sheller and Urry 2004). Youth and cars together occupy a peculiar place within automobility and car studies: either as a problem (Miller 2001), hence, the important corpus of literature related to youth, driving and accidents; or as a study which "examines the subcultural differences of various kinds of personal transports" (Carrabine and Longhurst, 2002: 183) such has car cruising. The latter studies also often take a problematic angle and the social problems of youth and driving, though their depiction of practices such as car cruising can be interesting (O'Dell, 2001; Vaaranen, 2004; Falconer & Kingham, 2007; Redshaw, 2008; Lumsden, 2009; 2010; Collin-Lange, 2012). However, little work has been conducted on the status and habits of unproblematic young drivers.

Many studies focus on car cruising and showed the mechanisms behind the automobility of certain groups of young people. The few studies conducted on the matter, for example Best (2006) showed that young people are a good examples of the social, cultural and personal mechanisms behind structuring one's automobility. Redshaw (2006, 2008) explored young cruisers in Australia, Lumsden (2009, 2010) – on young car cruisers in Scotland; came to the same conclusions. Others before, such as Carrabine and Longhurst (2002), explored a gender perspective and showed that car use among cruisers demonstrated "the salience of gender" in automobility. Unfortunately, those works are not yet properly acknowledge within current discussions about automobility. They should be included the current holistic approach of automobility as they would strengthen the understanding of the relationship between cars and society (Carrabine and Longhurst, 2002).

More focus should be put on young people in automobility and the fields should be broadened to look into the social and cultural reasons behind young people's car use and ownership. The social and cultural understanding of these would increase the understanding of young people's overexposure to car accidents (Redshaw, 2007) Young people's car use also reflects the greater social and spatial aspirations of youth.

#### **Methods**

This work is based on participant and non-participant observations and a questionnaire answered in spring 2007 by students in randomly selected classrooms in eight high schools (age 16-20) in the greater Reykjavík area. The lower participant age was set at 16, the legal age to start driving school or driving practice in Iceland at the time. The upper age limit was 21.

The questionnaire was composed of both quantitative and qualitative questions. The quantitatively part of the questionnaire included questions about motor vehicle ownership, trip length, frequencies and distances, the qualitative questions explored the reasons behind the modal choice, car use and ownership. Using cars for other activities than transport was probed, as well as the young people's perception of car culture and

road safety issues in Iceland. The questionnaire ended with an open-ended question encouraging respondents to write down their thoughts. The respondents gave very prolific answers about the car system to the open-ended question. All results from the qualitative questions were organised and classified according to thematic similarities such as car perception, ideas about driving, perception of young drivers, practical reasons, extra activities involving cars, road safety measures and more. There were no questions about ethnicity, gender differences or economic background of the respondents. A little data was collected about the work situation of young drivers which did not reveal any particular difference between respondents' economic situation of (Collin-Lange & Benediktsson, 2011). The timing of the survey deserves mention, inspiring 2007 Iceland's economy boomed, there was no unemployment, car loans with attractive rates were easy to get. This may have influenced the respondents' answers. However, the number of cars in Iceland decreased by only 1% since the beginning of the economic crisis (Hagstofa Íslands, 2011).

The questionnaires were answered by 553 young people, including 304 females (54%) and 249 males (45%). There were no general noticeable gender differences in the results. Most respondents, 57 % had a driving licence and 62% owned a car. Most respondents (64%) commuted between home and school by car (as drivers or passengers). Distance was not a factor influencing modal choices, and was not significantly different between the schools. Car ownership and use was considered a practical necessity, about 75% stated that they owned a car "to go from A to B" or stressed the inefficiency of public transport in the greater Capital area. However, 45% stated that they believed that they used their cars too much and 89% said that they were expensive to maintain. Most respondents were keen on improvements on the public transport system (for more details see Collin-Lange & Benediktsson, 2011).

One very important part of Icelandic car culture is the *rúntur*, the local form of car cruising. This activity predates the car being imported to Iceland and was done by young people walking. The importance of *rúntur* among young people was clear in the survey's results and more than two-thirds of the respondents said they went cruising on a regular basis, almost always with friends (Collin-Lange & Benediktsson, 2011; Collin-Lange, 2012). Many respondents explained in detail their cruising habits in detail in the open-ended question.

Parallel to the surveying, the author made participant and non-participant observations while attending a driving school. It was necessary for me, both for methodological and personal reasons, to get a driving licence as I moved to North Iceland for some months due to family reasons. Driving school was a methodological opportunity and this approach became part of the methodological framework of the study. The driving instructor was informed of my scientific interest. Notes and observations were written down during and after classes and driving lessons.

This methodological approach is contextualised with Büscher, Urry and Sheller's work on 'on-the-move' mobile methods and their call for a new mobility paradigm (Büscher & Urry, 2009; Sheller & Urry, 2006). The same authors have claimed that researchers themselves have to experience the mobility of their subjects in order to understand it which was done in this project. Geographers have been using mobile methods before; see for example the work of Laurier, 2008. However, drawing on ethnographic research traditions, those projects have been mainly related to places and the way people experienced them, and the role of the researcher within that particular observation (Celle, 2006). Few studies have been done on young people and mobility (Collin-Lange, 2012; Lumsden, 2009, 2010). Those 'on-the-move' and ethnological methods represent

an interesting opportunity for geography and people interested in youth studies to explore people and spaces of mobility.

The quantitative, qualitative survey combined with the semi-ethnographical approach have strengthened this project. The combination of methods clearly complemented each other and clarified results found in each methodological approach. It proved challenging to present the results in a global and coherent way, as can be difficult to put aside the personal experience and involvement of the researcher. Yet, the survey helped focus and locate the personal experience and give more clear sense to it. Finally it also affected the way the results are presented as it is ultimately not possible to separate the different methodologies. Thus the results are introduced here with semi-auto-ethnographical reflections combined with the qualitative results.

#### Into the spaces of automobility

#### **Entering**

I attended driving school while surveying the young drivers in high school. In the evening class I attended, there were about 30 other people. There were three teachers; two were driving teachers in charge of the technical aspects of cars and driving, as well as the safety part of the instruction. The third teacher, a policeman, taught the traffic laws and driving rules.

Walking into the classroom for the first time I immediately noticed that I was the oldest in the class. When we were asked to present ourselves, all the other learners turned out to be aged between 16 and 17. The minimum age to attend the theoretical driving courses is 16, but 17 is the minimum age for the driving part. A driving lesson is a popular 16<sup>th</sup> birthday present from parents. Being a 24-year old male living in Reykjavík with no driving licence made me feel like the class curiosity – not to say the freak. My classmates' first suggested that I had lost my licence due to reckless driving and had thus been obliged to retake the test. The policeman also thought that this was the case. When I denied this, they were astonished. Some asked me how I was getting around. After a few other questions about my origins and why I was staying in Iceland – as well as the mandatory 'how-do-you-like-Iceland' question – one theoretical teacher started explaining the basic 'anatomy' of the car. I was quite amused by the anatomic picture of the car on the screen and the teacher pointing with a stick to different parts: "this is the wheel", "this is the steering wheel" or "this is the brakes". This went on for half an hour or so, by then many young learners had become somewhat bored.

Some students, especially the girls, were chatting. One instructor asked them to stop and told them that important matters were being explained. He also added that because they were girls, they should be especially attentive. The girls did not seem to be pleased by the instructor's comments, but he justified himself by saying that the boys in the class were probably more aware of the mysteries of car mechanics. Obviously they – the boys, had played with a *kassabill* (a toy cart) when they were younger, and thus had probably acquired a lot of knowledge in the field of mechanics. The instructor proposed that the boys took a break during the mechanical lesson and came back once he was done with teaching mechanics to the girls. The boys gladly left the room, leaving the girls behind. To the instructor's surprise, I stayed on, not for research purposes but simply because I had very little knowledge about the mechanics of cars. This episode exemplifies how "cars define social relations" (Jain, 2005: 1), and echoes

the work of Best (2006) and Redshaw (2008) and how gendered car culture might be in Iceland. However, in the survey replies, there were no real differences in car use between genders which show that the teacher's gender attitudes concerning car mechanics do not reflected in the driving habits of young Icelanders.

The driving lessons were quite different from the theoretical classes. First of all, this is a private lesson. Most instructors work freelance and a 'cool' image is necessary in order to attract learners, therefore, the type of car they own is very important. During the theoretical lessons, the type of car used in driving lessons was a common topic of conversation among the learners. Learning to drive on a prestigious car apparently brings a certain status to the driver-to-be. I learned on a BMW from 2007, which was considered very cool. Some of my young classmates – the same ones who considered me a freak – even showed some admiration for me. They were only learning to drive on a Toyota Yaris.

My driving instructor was a relaxed type and fitted well the "cool" image of a driving instructor pictured to me during the theoretical lessons. He laughed a lot, especially when I was making 'funny' mistakes, like inadvertently running a red light or mixing up the accelerator and brake pedals. He told me that he advocated the 'do-or-die' way of learning: simply go out and do it. I learnt to start uphill on a very steep ramp at the harbour used to put boats in the water. No room for mistake there. He also took me for a small *rúntur* - in the downtown area of Reykjavík on an early Saturday evening. I felt a bit silly as I was driving a car with a driving school sign on the top, but when in Rome. After having completed the required driving hours with the instructor and a responsible person, I took the driving test. Luckily, I passed even though could find the fog light on the test car – but then, neither could the examiner.

I believe that my personal experience of the learning process is representative for most other learners, despite my age. The reason for entering driving school was a perceived need for autonomy and mobility, which the private car was expected to fulfil. In addition, I came to develop - along with most of my classmates - a special relationship with my car, like the author of the opening quote who stated her connection with the car in strong terms:

My car ('Jazzinn') is the most beautiful thing that I have ever possessed. We are in love. I will get my driver license in a month, and from then on, me and my car will be together forever. My car is the best thing that ever happened to me. I bought it myself and worked a lot to get it (16 year old female).

The relationship that the owner develops with her or his car thus reaches far beyond purposes of mobility. It evocates the symbolic and emotional, (Sheller, 2004; Best, 2006; Redshaw, 2008). Icelandic novice drivers pin a lot of hopes and values on their cars and build strong ties with them knowing that cars will offer them the best opportunities in a regime of automobility centred on cars.

#### Table 1: Main reasons behind car ownership

#### Instrumental reasons:

- "To go from A to B. Stupid question!" (18 years old male)
- · "Public transport in Reykjavík is useless" (20 years old male)
- · "I will not need to take the bus anymore" (17 year male)
- "Taking the bus was not working for me anymore" (20 year old female)
- · "I do not need to walk anymore" (17 year old male)

#### Freedom and independence

- "I don't have a driver licence. I will get it and when I will drive I will be free" (17 years old male)
- "To move between places by myself" (19 years old male)
- "To go between places and be independent" (18 years old female)

#### Playfulness and enjoyment

- · "This is just fun" (17 years old male)
- · "It is cool" (17 years old male)
- "To go between places and have fun" (18 year old male)
- · "I love to drive" (17 years old female)
- "This is comfortable, and fun to tease the cops" (19 years old male).

In the qualitative survey results, the main reasons for owning a car were either practical; to go between places, while others linked car ownership to freedom and independence, or enjoyment and pleasure. The practical car owners explained in detail why they owned and used a car to go from A to B. The bus system was not the only depreciated modal alternative; walking received its share of negative comments (table 1). Some people mentioned subjective ideas of freedom and independence that are inherent values in car culture as a reason for car ownership (see for example Carrabine & Longhurst, 2002; Dant & Martin, 2001; Miller, 2001a; Sheller & Urry, 2000; Thoms, 1998; Urry, 1999; Urry, 2000). While the official role of the driving instructors could hardly be defined as one of car advocacy, they perpetuated ideas of freedom and

independence and introduced their receptive audience to the wonderful promises of car culture. A few respondents linked their car ownership to the playfulness and enjoyment afforded by cars. They pointed out the fun and pleasure of owning car and driving it around. Some also showed their emotional involvement such as love of driving.

The scope of the respondents' answers displayed the superiority of owning a car in the Reykjavík area. They distanced themselves from public transport and other transport modes used before, pointing out their adequacy for sustaining their current life. It is clear that there is a shift between different modes of transportation fuelled by the believed inadequacy of their current situation, but also by the symbolic and emotional attachments associated with cars.

#### **Practicing**

The first thing that I did as a novice driver was to go downtown Reykjavík for the rúntur, on the car I had recently bought. The rúntur is a very popular activity among young people in Iceland. During weekend nights, cars line up and drive slowly down Laugavegur – the main street of downtown Reykjavík. This was not my first time on the rúntur, I had been there as a passenger, and also as a learner, carrying the stigmata of the driver-to-be, the "driving school" sign or the green "driver in training" sticker on the back of the car. The learners had talked a lot about the rúntur during the driving lessons and it seemed to be a very important thing to do if you were a young driver.

Very few cars were moving down the one-lane street as I drove slowly down the main street, hoping for my car to not stall, which it eventually did a few times. After two trips down Laugavegur, I happily drove home. For anyone not native to Iceland the rúntur might look like a traffic jam. Many drivers-to-be and young drivers see car cruising as an opportunity to learn about cars and driving as some of them stated in the survey: "it is fun to go cruising, because you can learn about cars" (18 years old male) or "I have the training permit and my cousin is taking me cruising in order to train me" (17 years old male). "People do it often, when they have just got their driving licence" (19 years old female). Most respondents wrote that they cruise for the enjoyment and pleasure: "It is just fun to go cruising" (18 years old female), or "it is fun to sit in the car and cruise" (17 years old male). Some people pointed out the importance of doing it with friends and emphasised the social aspects: "I do it mainly to chat with my female friends" (18 years old female), and "this is a good place to meet and chat with friends" (20 years old male). Enjoyment can also take the form of challenging social norms: an 18 years old male said he went cruising in order "to chill and make fun of fat cops". Another wrote "Fun to drive, going fast" (19 years old male). Cruising can also be erotic or sexual. Some pointed out that they used it as an opportunity to "look at girls" (17 years old male) or to "pick up boys" (18 years old female). Many respondents directly linked their car ownership to the rúntur phenomenon and simply wrote "rúntur" as a reason for car ownership. Rúntur was described as "meeting with friends, going to buy ice-cream, and cruise" (19 years old female). A variation was, "isbiltúr", which literally means "icecream drive", first going to the ice-cream store, and then driving down Laugavegur.

The car renders these youth with an opportunity to meet and chat, but this enjoyment and pleasure is also derived from outside the car. Some presented cruising as a way to experience the city's nightscape and to reach spaces that would otherwise be off-limits because of their age. People younger than 21 are not legally allowed entrance to the bars and clubs of Reykjavík. Hence, "the *rúntur* is one way to show yourself and check out others" (19 years old male), or "to go look at people and the city centre", and "to check what's going on downtown" (18 years old female). Some young drivers point out

that even if they are not allowed to enter bars and clubs they still play a part in the city nightscape via their cruising activities. Some give rides to their friends, drive them from bars and clubs and "drop them some places" (18 years old male) while they collect stories and details about what is happening in bars on the way.

One other very common reason evoked for cruising is that there is "nowhere to go and nothing to do" as some put it: cruising is a way to "kill time" (17 years old female). There is also a certain spatial in-betweenness here: "I do cruise just to do something when I am going between two places" (19 years old male). Many young people appear to be stuck somewhere between the domesticity of home and city life. Some point out that they cruise to escape their parents' home Saturday evening: "Don't want to hang around inside" (19 years old male), or "it is convenient to be able to do this, to be able to see others without having parents around" (18 years old male).

The *rúntur* is one important example of the practices of young people while they construct their automobility. Cruising express a longing to prove to oneself and to the world that one is an independent and competent driver. This echoes recent work on *rúntur* in Iceland (Collin-Lange, 2012) and car cruising in general (Best, 2006; Lumsden, 2010). As a novice driver myself, I felt the same as my subject studies but soon find out I was neither competent nor ready to drive alone.

#### Reflecting

Exactly eight days after receiving my licence I crashed my car. I was driving alone in a countryside road in the north of Iceland. It was a warm and sunny afternoon, the windows were open and I was listening to the radio. I was not driving too fast, and just before the accident, I remember feeling that I was really on top of the situation. Suddenly, a white lamb appeared out of nowhere, crossing the road in what seemed like a suicide attempt. I avoided the collision, but my car ended up in a field 30 meters from the road with a long stretch of barbed wire fence wound around it. Fortunately, I was unhurt, although very shaken. When I crawled out car the police was already there. They had been driving behind me. They checked if I was OK and asked me what had happened. I told them about the lamb and pointed out the guilty one with an accusing finger. It was grazing a couple of meters away from the car blissfully unaware of the situation. They called a tow truck, when it came I remember feeling sad to see my car, lying lifeless in the field. I had failed my car. The honeymoon with was over. I realised in few seconds how inexperienced I was as a young driver. When the tow truck had dragged my car back to the road, a miracle happened. My car started. It was alive, wounded but not dead. I drove home carefully with much scratched pride and car. I thinking that the learning process went too fast and that I was simply not ready to drive. A feeling of not being ready to drive was shared by many respondents in the survey.

According to the comments in the survey, young drivers think much about their own mobility. Contrary to common belief, they are quite critical toward their own automobility and the way it is expressed. They question both their status within this regime, but also the legal driving age. Many of them pointed out that they felt too young to drive; that they were not ready to face the difficulties of traffic. Some even wrote that the driving age should be raised: "A lot of young people are getting their driving licence too early" (21 years old female); or "I think the driving age should be raised by 1 or 2 years to prevent accidents among young people" (20 years old male). Maybe, as I pointed out from my own experience, the training is not long enough and

young drivers feel insecure or unprepared to face the traffic. Many expressed the same insecurity I had felt myself. Some suggested that people should retake the driving test regularly.

But at the same time as being critical towards their own driving ability, some took the opposite stance, some respondents claimed "there is too often a prejudice against young people: "Older people are also involved in many car accidents" (18 years old male). They showed much concern about driving and road safety. One pointed out that "We [young drivers] might be inexperienced, but at least we know the rules" (17 years old male). Some argued that more experienced drivers seemed to have forgotten the rules a long time ago and needed to retake the driving test. The quantitative results also showed that the overwhelming majority of young drivers were in favour of for example, a stricter police: "increase the fines, and multiply the number of policemen" (18 years old male), and over speeding was not popular. This contrasts with the common images that society has of young people as reckless drivers with little respect for rules and demonstrated by other authors (Best, 2006; Falconer and Kingham, 2007).

Many respondents thought that the car culture in Iceland is "getting out of hand. People own more than one car and do not walk anymore or take the bus" (19 years female). Others proposed solutions: "There are too many cars in Iceland, especially in Reykjavík. I would take the buses if they were better organised and cheaper" (19 years old female). Others complained about the way the bus system was managed in Reykjavík: "Buses are public services. They should not be managed for making profit..." (19 year old female). Some suggested that Iceland should "have a metro or a tram system to reduce car traffic" (20 years old). Others pointed out that people often drive alone, especially in the morning: "It is much better to go with others than to be alone in the car" (18 years old male).

#### **Discussion: Ambivalent automobility**

"Cars give one freedom – a space to be with oneself and opportunities to travel from one place to another" (19 years old male).

One's relation to one's own mobility is a complex thing, as the author's personal experience illustrates this in the paper. Mobility implies a multitude of interactions between individuals, spaces and places. Technologies of movement make those interactions possible. The quote above sums up the relationship that young people have with cars and the central position they hold in today's regime of automobility. More than simply providing their users with autonomy and independence, cars promise unlimited access to space and control over it. The quote also illustrates how individuals use objects in other contexts than their intended ones.

The car acts upon one' spatiality and reorganises it. It is an object which allows its users to both reorganise their spatialities, their way of "spacing" (Malbon, 1999), but is also going to help the users access future spaces. The driving licence and the car thus provides young people with an "access to more places further away and hence enlarged the territory in which their everyday activities are located" (Beckmann, 2000: 22). They will access those spaces, claim them and exercise power over them. Those newly accessed spaces will serve as moorings enabling their automobility. In this perspective, the regime of automobility becomes an expression of human territoriality. It is a way to access and assert a claim toward spaces and to challenge spatial dependence, but also

to affirm a both social and spatial status. Automobility is a form of 'spatiality'. This is the *modus operandi* of automobility and where its strength lies. However, one has to learn how to be automobile.

At first sight, the driving school appears to be a practical step en route towards the realisation of automobility. It has great formal importance, because it gives young people access to the car itself, supposedly stripped of social and cultural values. But the strength of car-based automobility lies in the fact that people integrate those values very early, long before getting a driving licence. They recognise the codes of conduct for a car based automobility and know that within a mobility craving society, that car based mobility will provide the necessary social status for a certain integration. Those codes and ideas about social status (Dant and Martin, 1999, Best 2006, Redshaw, 2007, 2008) are informally transmitted by society, and sanctioned by the driving school. This study showed the importance of this informal transmission and gave examples of its influence on the driving learning processes.

Young people's participation in the *rúntur* completes their driving education. The *rúntur* is an 'informal' practice which plays an important part in non-official transmission of codes and ideas about cars in Iceland (Collin-Lange, 2012). The case of the *rúntur* shows the importance of such informal structures such as car cruising within the system of automobility and how they sustain the system as a whole. In Iceland, this informal practice complete the formal and official teaching offered by the driving school. Car cruising in Iceland somehow signifies one's first step within the regime of automobility. Experienced drivers show non-drivers how to drive and how to socially and culturally behave while driving. They confer to drivers to be the social and spatial possibilities of automobility in the very concentrated moment and space of the cruise. The *rúntur* is an example of how presence and co-presence affects and shape the construction of the identity of the *automobile* being as the different actors acknowledge each other. It shows the centrality of socialities within the systemic regime of automobility and the importance of peer acknowledgment (Collin-Lange, 2012).

Studies on youth and car cruising also demonstrate a lack of knowledge about youth and car culture, beyond the accident perspective and moral fears (O'Dell, 2001) one may have when witnessing such car based activities. This lack may contribute as Lumsden also pointed out in her piece about cruisers in Scotland (2007, 2008) to the bad image of those kind activities among local and usually older population. However, curiously, most parents in Iceland approve of their teens cruising. There is no moral or social fear of cruising as found in most other studies (O'Dell, 2001; Lumsden, 2007, 2008; Gofman, 2004). It is a very normal and normalizing process. That is why maybe respondents were keen on explaining their responses the why and how of car cruising in Iceland, including their own.

Many young Icelanders linked their car ownership and use to idealistic values of freedom and independence, mirroring current discourses on cars and automobility, (Sheller and Urry 2004). However, they are also quite practical when it comes to their modal choices. Young people claimed that their previous modes of transportation did not sustain their social and spatial needs, thus they had to get a car to fulfil those needs. Oddly, some respondents claimed that if other means of transportation were capable of sustaining their longing for autonomy and mobility, they would opt for those, even making suggestions on possible solutions that would apparently not alter their current and very much appreciated level of autonomy and mobility. This raises the

question of efficient mobility and how individuals realise it and echoes the work of Böhm et. al. on possible alternative forms of automobility (2006).

Young Icelandic drivers' ambivalent position when it comes to automobility represent a good source of information when diagnosing the underlying reasons behind Iceland's car system. In addition, Interesting questions about youth and automobility were raised in the results of the survey, which gave important information about Icelandic youth and their aspirations. In light of these results, the car and the practice of automobility have to be considered in a more global way. Not only are the young drivers trying to sustain their mobile needs, they are also inserting themselves into society. The car temporary helps them breach some of the gaps they encounter on their way to adulthood. In that sense, social perspectives on automobility appear to be good measuring tools to understand questions of youth and their aspirations for the future. More social and cultural focus should be put on young within the field of mobilities. Many of the studies concerned with young people within the field of automobility do point out their vulnerability and their accident exposure. However, a lot has still to be done on the cultural, social and societal use they make of cars and their care based automobility. We, researcher interested in youth and mobility would gain a lot from listening to their voices as they are the best to express and expose their status and not only look into quantitative studies. Almost ten years after the first definitions of the system of automobility those works are still extremely relevant. Certain groups such the ones composed of young peoples have yet to be considered for what they truly are and not what they seem. In other words, exploring those groups, will give us a better understanding of the structure of system of automobilities but also elucidates general questions about the place of youth in society.

#### References

- Agnew, J. (2007). Spatiality and Territoriality in Contemporary Social Science. Paper presented at the First International Seminar of Social Spatial Studies: Geopolitics, Power Spaces and Spaces Power.
- Beckman, J. (2002). Car Custodians: Reflexive automobilization under and in the eye(s) of FDM. Trafikdage
- Beckmann, J. (2000). *Heavy Traffic Paradoxes of a modernity mobility nexus*. Paper presented at the 'Research seminar on Mobility'.
- Best, A. L. (2006). Fast Cars, Cool Rides: The Accelerating World of Youth and Their Cars. New York & London: New York University Press.
- Borden, L. (2001). Skateboarding, space and the city: architecture and the body Oxford: Berg.
- Borden, L. (2005-2006). Drive: Urban Experience and the Automobile. *Haecceity, Critical Architecture theory INC, Public Lecture Transcipts 2005–2006*.
- Büscher, M., & Urry, J. (2009). Mobile Methods and the Empirical. *European Journal of Social Theory Vol. 12*(1), 99–116.

- Böhm, S., Campbell, J., Land, C., & Paterson, M. (2006a). *Against Automobility: Social Scientific Analyses of a Global Phenomenon*. Hoboken: Wiley-Blackwell.
- Böhm, S., Campbell, J., Land, C., & Paterson, M. (2006b). Introduction: Impossibilities of automobility in Böhm, S., Campbell, J., Land, C., & Paterson, M. Eds. *Against Automobility: Social Scientific Analyses of a Global Phenomenon.* (pp. 1–16) Hoboken: Wiley-Blackwell.
- Carrabine, E., & Longhurst, B. (2002). Consuming the car: anticipation, use and meaning in contemporary youth culture. [Proceedings Paper]. *Sociological Review*, *50*(2), 181–196.
- Collin-Lange, V., & Benediktsson, K. (2011). Entering the system of automobility: Car ownership and use by novice drivers in Iceland. *Journal of Transport Geography*, 19(4), 851–858.
- Collin-Lange, V. (2012): Socialities in Motion: Automobility and Car Cruising in Iceland, Mobilities, DOI:10.1080/17450101.2012.743220
- Creswell, T. (2006). On the move. Mobility in the western world. New York: Routledge.
- Creswell, T. (2010). Mobilities I: Catching up. Progress in Human Geographies 35(4): 550–558.
- Dant, T. (1998). Playing with things. Journal of Material Culture, 3(1), 77-95.
- Dant, T., and Martin, P. J. 2001. By Car: Carrying Modern Society. In Groncow, J. and Warde, A. Eds. *Ordinary Consumption*. (2 ed.) (Studies in consumption and markets). (pp. 143–157). London: Routledge.
- De Certeau, M. (1984). The practice of everyday life: University of California Press, LTD.
- EEA, T. (1995 2009). Vehicle stock, 1995-2009 Retrieved 04/12/2011: http://glossary.en.eea.europa.eu/terminology/sitesearch?term=Car+ownership
- Featherstone, M. (2004). Automobilities, An introduction. *Theory, Culture & Society,* 21(4/5), 1-24.
- Flamm, M., & Kaufmann, V. (2004). *Operationalising the Concept of Motility:A Qualitative Exploration*. Paper presented at the Paper presented at the ad-hoc Session "Mobility and Social Differentiation" of the 32. Kongress der Deutschen Gesellschaft für Soziologie.
- Fotel, T., & Thomsen, T. U. (2004). The surveillance of children's mobility. *Surveillance and Society*, 1(4), 535-554.
- Freudendal-Pedersen, M. (2007). Mobility, Motility and Freedom: The Structural Story as Analytical Tool for Understanding the Interconnection. *Swiss Journal of Sociology*, 33(1), 27-43.

- Falconer, R. and Kingham, S. (2007) 'Driving people crazy': A geography of boy racers in Christchurch, New Zealand. New Zealand Geographer 63(3): 181-191.
- Gofman, S. (2002-2003). Car cruising: one generation's innocent fun becomes the next generation's crime. *Brandeis Law Journal*. 41(1): 1-31.
- Gofman, S. (2004). The end of cruising. Retrieved at http://www.caranddriver.com/features/04q2/the\_end\_of\_cruising-feature [Accessed January 1, 2011].
- Hagstofa Íslands (2009). Fólksbílar pr. 1000 íbúa (*Inhabitants per passenger car*). Hagstofa Íslands: Reykjavík
- Hagstofa Íslands (2011). Skrásett ökutæki í árslok 1986-2009. (*Number of registrer vehicules at the end of the year 1986-2009*). Hagstofa Íslands: Reykjavík
- Hannam, K., Sheller, M., & Urry, J. (2006). Editorial: mobilities, immobilities and moorings. *Mobilities*, 1(1), 1-22.
- Jain, J., & Guiver, J. (2001). Turning the Car Inside Out: Transport, Equity and Environement. *Social Policy and Administration*, *35*(5), 569-586.
- Jain, S. S. (2005). Violent Submission: Gendered Automobility. *Cultural Critique*(61), 186-214.
- Kaufmann, V., Bergman, M. M., & Joye, D. (2004). Motility: Mobility as Capital. International journal of urban and Regional research, 28(4), 745-756.
- Low, S. M. (2003). Embodied Space(s): Anthropological Theories of Body, Space, and Culture. *Space and Culture*, 6 (9-18).
- Lumsden, K. (2009) 'Do We Look Like Boy Racers?' The Role of the Folk Devil in Contemporary Moral Panics. *Sociological Research Online*, 14 (1) 2. http://www.socresonline.org.uk/14/1/2.html
- Lumsden, K. (2010) Gendered Performances in a Male-Dominated Subculture: 'Girl Racers', Car Modification and the Quest for Masculinity. *Sociological Research Online*, 15 (3) 6. http://www.socresonline.org.uk/15/3/6.html
- Malbon, B. (1999). *Clubbing dancing, ecstasy and vitality*. London and New york: Routledge.
- Miller, D. (2001). Car Cultures. Oxford: Berg Publishers.
- O'Dell, T. (2001). 'Raggare and the Panic of Mobility: Modernity and Everyday Life in Sweden' *Car Cultures*: (pp.105-132) in Miller, D. Ed. *Car Cultures*. Oxford: Berg Publishers.
- Rajan, S. C. (2006). Automobility and the liberal disposition. *The Editorial Board of Sociological Review, 54*, 113 –129.

- Redshaw, S. (2007). "Articulation of the car: the dominant articulation of racing and rally driving." Mobilities 2: 121–141.
- Redshaw, S. (2008). In the company of cars: driving as a social and cultural practice (human factors in road and rail transport). London: Ashgate.
- Reynarsson, B. (1999). The planning of Reykjavík, Iceland: three ideological waves a historical overview. *Planning Perspectives*, 14 (1), 49–67.
- Sheller, M. (2004). Automotive emotions: Feeling the car. *Theory, Culture & Society*, 21(4/5): 221–242.
- Sheller, M., & Urry, J. (2000). The City and the Car. *International journal of urban and Regional research*, 24 (4).
- Sheller, M., & Urry, J. (2006). The new mobilities paradigm. *Environement and Planning* A, 38(2), 207–226.
- Sigmundsdóttir, A. (2009). When Taking the Bus Is for Losers [Retrieved October 14, 2009] http://www.huffingtonpost.com/alda-sigmundsdottir/when-taking-the-bus-is-fo\_b\_320482.html
- Silverstone, R. (1994). *Television and Everyday Life*: London. Routledge.
- Skeggs, B. (2004). Class, self, culture. London & New-York: Routledge.
- Thoms, D. H., Len. Claydon, Tim (1998). *The Motor Car and Popular culture in the 20th Century.* Aldershot: Asgate.
- Urry, J. (1999). Automobility, car culture and weightless travel. University of Lancaster. [Retrieved on the 23<sup>rd</sup> of January 2009]. http://www.lancs.ac.uk/fass/sociology/research/publications/papers/urry-automobility.pdf
- Urry, J. (2000). Sociology beyond societies: Mobilities for the twenty-first century: London. Routledge.
- Urry, J. (2002a). Inhabiting the car. Department of Sociology, Lancaster University. [Retrieved on the 26<sup>th</sup> of November] 2008]. http://www.lancs.ac.uk/fass/sociology/papers/urry-inhabiting-the-car.pdf
- Urry, J. (2002b). Mobility and Proximity. Sociology, 36(2), 255–274.
- Urry, J. (2004). The "System" of Automobility. *Theory, Culture & Societ. 21(4/5):25–39*.
- Vaaranen, H. (2004). The emotional experience of class: Interpreting working-class kids' street racing in Helsinki. [Proceedings Paper]. *Annals of the American Academy of Political and Social Science*, 595: 91–107.

### Paper III

## Socialities in motion: Automobility and car cruising in Iceland



## Socialities in Motion: Automobility and Car Cruising in Iceland

#### VIRGILE COLLIN-LANGE

Department of Geography and Tourism, University of Iceland, Reykjavík, Iceland

ABSTRACT Car cruising is a common phenomenon around the globe. In Iceland, the activity is a major assimilative sociocultural phenomenon for young people and especially for novice drivers. This article documents car cruising in Iceland and contextualizes it within discussions of automobility. It is based on semi-structured, 'on the move' interviews taken with people during cruising. Participants were also asked to take pictures of their cruising activities. It seems that car cruising is an opportunity for young people to integrate themselves into the systemic regime of automobility. This shows the importance of socialities when it comes to individual practices and expressions of automobility, but also the structuring role of those socialities. The paper also elucidates how that activity impacts upon spaces. It demonstrates that it is intimately connected with human territoriality, or how young drivers appropriate and influence the spaces and places of automobility and ultimately contribute to their production and reproduction, thus sustaining the systemic regime of automobility.

KEY WORD: Socialities

#### Introduction

Anyone taking a stroll on Laugavegur, Reykjavík's high street, on a weekend evening will immediately notice something quite particular: a great number of cars full of young people, very often the same ones again and again, leisurely driving the one-way street in a file. To the non-initiated, this looks like a traffic jam, but in fact this is the *rúntur*, the local version of the general phenomenon of car cruising, which is found in many countries. Today, the activity particularly attracts young people and novice drivers, but the activity is far from being recent.

In Iceland, most people get a driving licence as soon as they reach the legal driving age and many acquire a car. In a 2007 survey of 535 people in the greater Reykjavík area, aged between 17 and 21, almost 90% of the respondents declared that they had a driving licence or were in the process of getting it (Collin-Lange and Benediktsson 2011) and nearly 80% practiced car cruising, which indicates that this is a very popular activity among young people. The people involved in cruising highly interact with each other, develop social links and are engaged in an open

Correspondence Address: Virgile Collin-Lange, Department of Geography and Tourism, University of Iceland, Askja, Sturlugata 7 IS-101 Reykjavík, Iceland. Email: vrc1@hi.is

#### 2 V. Collin-Lange

and collective process. Cruising is in this way a form of sociality. Sociality is considered both how individuals develop social links between each other and how those links are being used. In the case of car cruising, that sociality includes not only simple social interactions between the different actors involved, may they be drivers, passengers, individuals situated outside the car or other constituted groups; but also their inherent sociability, their capacity of interacting with each other and thus integrating themselves into the systemic regime of automobility.

The aim of this paper is to document the current Icelandic version of the car cruising phenomenon and to analyse its significance for young people in the Reykjavík area: this is thus an analysis of one example of the sociality of automobility. It is clear that socialities are an inherent part of the way individuals construct and practice their automobility. The question is how and to what extent. In the case of the *rúntur* in Iceland, that activity translates the desires of young people riding together in order to socialize themselves into automobility. Furthermore, the activity influences the spatialities of automobility. On one hand the activity challenges the spaces of automobility, temporarily reorganizing the spaces and places coming across its path; on the other hand it contributes to the reproduction of the spaces and places of automobility, thus ultimately showing how the social is in fact a matter of space and its production. Automobility here is the catalyst.

In this paper, I explore the sociality of the system of automobility and demonstrate its importance, especially when it comes to novice drivers entering that system. In order to do so, semi-structured 'on the move' in situ interviews have been taken with young people cruising in the Reykjavík area. The paper first briefly presents cruising in Iceland from a theoretical and historical perspectives before looking at cruising from a more general perspective. Proceeding from that, the links between automobility and sociality are explored, and then a special focus is put on previous writings about car cruising in general. Methods used for this work are then presented and contextualized within current discussions about mobile methods. Finally, the paper enters the rúntur itself, with empirical results presented before discussing and engaging with the results of the interviews.

#### Cruising in Iceland

In spite of its popularity and long history, the *rúntur* is not well documented in Iceland, neither academically nor in popular culture. For example, only very few books and popular songs mention the activity. It existed long before cars started to roam the streets of Reykjavík. The first description of the *rúntur* dates back more than a century. People at that time were doing it by walking, there are some accounts of people doing it with horses (Hornstra 2006). The Icelandic author Þórbergur Þórðarson, in his semi-autobiographic novel *Ofvitinn* (2001 [1940]), described what he calls the *Rúntur* (*sic*). The scene he depicts happens around 1909. The author gives a clear and detailed description of where, how and when the activity took place, and what people were doing:

We were always sure to see plentiful supplies of women down on the Cruise, not one or two, but a whole warehouse. In those days, there were two rounds, the smaller Cruise and the larger Cruise. The smaller Cruise went around Austurvöllur Square. The larger Cruise, however, went from the north-west corner of Hótel Ísland, then south along Aðalstræti, east on Kirkjustræti, north

by Pósthússtræti and then west on Austurstræti to Aðalstræti. A slow current of men and women moved along the Cruise from nine to eleven and sometimes even twelve at night. (Þórðarson 2001 [1940], 175, capital letters in original text, translated by Hanne Krage Carlsen)

Later in the same book he also gives a fairly clear description of what the men and women who were taking part in this 'Cruise' were exactly doing. According to Þórðarson, they had much interaction with each other; they even spoke their own language, particular to the rúntur; and the whole activity is described by the author as a learning experience:

All communicative transactions of these people on the Cruise took place in some sort of sign language. It was a beautiful language which we tried hard to understand and we did at last - and then some - after a long walk through this serious evening-school of life. If a girl passed by a boy, showing him an arrogant face, it was a sign that she was a virgin or he was ugly. (2001[1940], 176, capital letters in original text, translation Hanne Krage Carlsen)

In the early 1900s, the 'Cruise' was an opportunity for its participants to observe and interact with each other, as well as to explore the streets of downtown Reykjavík. The key element of this exploration was the participant's mobility. What people were doing in 1909, people are still doing today, albeit using a different technology of mobility: the car. Since its arrival in Iceland, it has become central to the activity. Curiously, car cruising in Iceland has little to do with the car in itself, and more to do with driving. Thus, the way people are doing it today is extremely similar to what people did at the beginning of the last century. It has to do with mobility, and how individuals make a signifying collective use of it.

#### On Car Cruising

Quite an interesting corpus of literature exists on car cruising in general (Goldberg 1969; Gofman 2002, 2004; Lumsden 2009, 2010). However, the activity has yet to be theoretically situated within general mobility studies and included in the current conception of automobility. However, most work that has been done around automobility seems to have left aside and disregarded some activities involving cars such as car cruising (Goldberg 1969) and 'dogging' (Bell 2006). Yet, as many have pointed out, those activities are extremely important when it comes to individual practices of automobility (Best 2006; Redshaw 2007, 2008; Lumsden 2009). Those forms of automobility are often considered superfluous, frequently depicted negatively and presented as dangerous by popular media. They give rise to moral panic at regular intervals, which have been studied a great deal, e.g. concerning 'boy racers' in Scotland (Lumsden 2009) or the Swedish raggare (O'Dell 2001). All of those works present interesting facts about particular aspects of automobility, such as the social and cultural importance of the car for youth (Goldberg 1969; Best 2006; Redshaw 2008), masculinity (Lumsden 2009, 2010), gender relations and societal views on women and their mobility (O'Dell 2001) or social fears, laws and youth (Gofman 2002, 2004). Gofman has pointed out that in some countries cruising is so controversial that it is forbidden.

#### 4 V. Collin-Lange

Cruising can be witnessed in many different countries and be expressed itself in many different ways. Vaaranen and Wieloch looked at the Finnish version of cruising (Vaaranen and Wieloch 2002; Vaaranen 2004) through the example of young men from working class families. Best (2006) studied car cruising in America, particularly in the city of San Jose, where she showed the importance of cars and cruising for Latino minorities. Armstrong and Steinhardt (2006) and Lumsden (2009) explored, respectively, the phenomenon of the 'hooning' cruising culture in Australia and the 'boy racer' in the UK.

Other research related to car cruising has interestingly pointed out the risky lifestyles of boy racers (Leal et al. 2007; Redshaw 2008) and how deviant and troublesome cruising as such is often considered by the general public (Brownlie et al. 2007) and the authorities. These considerations raise interesting questions about driving, youth and society in general. But this has to be contextualized. In Iceland for example, the activity is more praised by the general public than contested. Looking at those different works, one could argue that cruising constitutes an important part of how individuals both individually and collectively construct, express and practice automobility. They also give interesting readings of the numerous and diversified form of socialities of automobility. They depend moreover on the places and spaces in which they happen. It makes them both peculiar and yet common as they are part of a single activity: automobility. It is the case of rúntur in Iceland.

The oldest and the seemingly most precise definition of cruising comes from Goldberg and dates from 1969. He defined cruising as 'nothing more elaborate than driving down a popular boulevard, watching the people on week-end nights' (Goldberg 1969, 164), where drivers interact with each other, sometimes 'car-calling' one another using horns, motor engines and light, watching each other, smiling and flirting (Goldberg 1969). According to the same author, drivers usually proceed slowly in a file down a defined road, often acknowledged as 'the strip'; turn around and drive back the same way. The activity is often repeated several times. There is also usually a place, where drivers can eventually go and hang out along the strip. This may be a parking lot, a petrol station or ice cream store, for instance. Drivers may be alone in their cars or accompanied by several passengers (Goldberg 1969).

Recently, people have come to understand cruising as a form of subculture (Lumsden 2009; 2010) with sometimes a strongly constituted community. It usually involves a group dynamic where emergent socialities are produced (Brownlie *et al.* 2007). The group members can either know each other or think that they belong to a pre-formed community. They can also form a momentary community, where group members do not necessarily know each other, but convene under certain conditions. Those communities might be united by their common interests in stylizing and customizing cars and mechanics. Studies have shown that young drivers are usually more involved in cruising than their older peers, although there are some cases where older drivers are involved in the cruising scene (O'Dell 2001).

Most of the work on car cruising presents the car as the main actor; as the element that creates the togetherness necessary for social interaction (Best 2006). Maffesoli suggested that objects, such as the car, are 'vectors of communion' (Brownlie *et al.* 2007, 116) and that cars are the main attraction of the cruise in itself. Yet, driving – mobility in itself – is the main attraction of the cruise. Driving catalyses social relations that are involved in the process of automobility (Böhm *et al.* 2006). These social relations are manifested as forms of display and enactment of social classes (Latimer and Munro 2006; Rajan 2006). They 'elicit kinds of

behaviours that step outside the widely accepted rituals and customs of social interaction' (Latimer and Munro 2006, 48). According to this work, automobility becomes a mediated form of sociality, and driving - the active component of automobility – catalyses such sociality.

Cruising also affects everyday spaces and places. During the activity, some streets and places might be taken over by cars. This may lead to conflicts between cruisers, 'regular' drivers, local residents and authorities, as Gofman pointed out (2002, 2004), and reorganization of the street traffic. Usually, people involved in the activity make a clear difference between regular driving - classical transportative use of the streets – and what is being done during car cruising. The two activities are not parts of the same spatial dynamic. Cruising represents the 'marking out' of territory; a symbolic attempt to 'win contested spaces' (Clarle et al. 1993 in Brownlie et al. 2007, 116) and could be understood as expression of human territoriality (Sack 1986). It is an attempt to access public spaces and temporarily claim ownership of them, as is the case with the strip (Goldberg 1969). Furthermore, in some cases, for example in Iceland as will be shown, car cruising partially blurs the different spatial delimitations of the street.

Car cruising is a particular activity that has to be thought about within the concept of automobility. As pointed out by many of the authors referred to above, the activity covers a range of socialities that goes beyond the simple transportative purpose. Yet, it does seem that those socialities are structuring part of the way people construct and practice their automobility. The rúntur in Iceland, or car cruising in general, is just one particular example. The activity seems to be even more significant for young people entering automobility, as it both contributes to their socialization as subject belonging to the regime of automobility and also gives them the opportunity to challenge the spaces and places that the same regime renders. Yet they also act upon the production and reproduction of those spaces and places, thus sustaining the regime of automobility.

#### Sociality on the Move

The concept of automobility, initially defined by Sheller and Urry (2000), has been presented as a system (Urry 2004); 'a complex amalgam of interlocking machines, social practices and ways of dwelling' (Sheller and Urry 2000, 739). This system is made up of six key elements 'humans, machines, roads and other spaces, representations, regulatory institutions and a host of related businesses and infrastructural features' (Edensor 2004, 102). The original attempt of Sheller and Urry was to try to understand the overwhelming significance of cars in modern society. Their conceptualization rightfully caught the essence of the car system and paved the way to a better understanding of car cultures. Moreover, Sheller and Urry tried to understand the car beyond the machine and to look, for example at the social relations that structure automobility (Sheller and Urry 2000).

The constitutive social relations of the systemic regime of automobility may have been overlooked because of what Miller (2001) calls the 'taken for granted' when it comes to cars. The social significance of the car 'has been overlooked to the detriment of an accurate understanding of the extensive role it plays in people's lives' (Brownlie et al. 2007). The same can be said about driving. It is a highly social activity. Drivers may be caged into metal cocoons (Lupton 1999), but they have to be sociable, not only for the everyday sake of the system of automobility, but for their

own sake too. Dant explained that the 'assemblage of the driver-car' (Dant 2004, 64) is a form of social being that produces a range of social actions which are associated with the car (Redshaw 2008). Those social actions are valuable when trying to understand automobility. The car, its system, and its culture should not be cornered into some kind of individualist assemblage, alienating people, places and spaces; it should not be reduced to a mechanical act, leaving very limited place for emotions (Sheller 2004) and social interactions. We should not deny 'the implicit sociality of an activity like driving' (Redshaw 2008, 75) because this is after all what makes the system of automobility possible. In the case of the automobility, sociability here is a collective open process meaning that it is co-constitutive and based on the attitudes and willingness of the different actors involved. The development of social interaction here serves a specific purpose. Driving is the means of that purpose.

Following those thoughts on social relations within automobility, other authors introduced the idea that automobility should be thought of as a *regime* bringing out 'the power relations that make that system possible' (Böhm *et al.* 2006, 6) and thus completing Sheller and Urry's original conception of automobility (Sheller and Urry 2000). Those power relations are social. They encompass the social interactions, sometimes hierarchized between the different actors involved in the system of automobility and contribute to the system of automobility. In other words, paraphrasing Redshaw (2008), automobility is social and only possible because it is social. It is also a matter of power, of status, structured and reproduced by social interactions and making the systemic *regime* of automobility possible.

Furthermore, those power relations are spatial, as they express a longing for spaces and represent a form of human territoriality. Human territoriality has been defined as 'the attempt by an individual or group to affect, influence, or control people, phenomena, and relationships by delimitating and asserting control over a geographic area' (Sack 1986, 19). Those power relations shape places and spaces and construct the rules defining boundaries between people like a certain form of motorized mobility. Moreover, they contribute to the production of space in the way Lefebvre (1999) conceived it and thereby affect the social. Here sociability plays a key role, as it sets up the necessary collective process for the transformation, production and reproduction of spaces which will themselves influence socialities. Automobility here is just a means of doing so. Car cruising is a particular moment where sociality is more exposed to the open gaze, as compared to more regular car-based activities. The sociality is somehow more 'intense', therefore more engaging. Thus, it influences the spatial in a particular way, exposing the schemes by which space is being acquired, challenged, produced and reproduced.

#### On Methods

Sheller and Urry (2006) have called for an exploration of new methodologies 'on the move'. The current research has been inspired by this call. Such methodologies are innovative and challenging in the way they force/encourage researchers to both think and act outside the classical methodologies, and were particularly apposite for fieldwork that involves both young drivers and mobility. The first part included *in situ* interviews: in the car and 'on the move' interviews of people while they were cruising, meaning that the interviews were only taken when the people were cruising/driving. In this way, 14 interviews were conducted with young people – seven males and seven females. They lived in different parts of the capital area.

Most of them were grammar school students. All the participants were aged between 17 and 21. The minimum age for driving is 17 years, whereas at 21, most youth have finished grammar school. At that age, they may have started to drink alcohol; the legal drinking age in Iceland is 20. Most of the participants had a driving licence. One of them was about to get a license.

The original plan was to randomly approach people involved in car cruising during weekend nights, but this was not successful. Car cruising is a very intimate activity and the young people involved in the activity were not willing to let anyone, even friendly researchers, get into their car. The methods were thus redesigned. Contact was made with several potential drivers, contacted through different distant acquaintances, who were supposed to inform me when they were going cruising. The interviews were made when the participants were car cruising in Reykjavík. The driver could bring some friends along. In all cases, drivers came accompanied with at least one person. Some of them picked up friends during the interviews. Those friends also took part in the interviews. Trust was an issue, despite contact with the participants having been made through acquaintances and reliable sources. Fears were expressed by most of the 14 participants that I was spying on them for their parents, or working for the police, and at several occasions I had to reiterate the fact that I was not a spy. Trust had to be earned and people were concerned about eventual intrusion and disruption of their private life. People were somewhat reluctant at first to answer questions or discuss their rúntur experiences. It was only after having bought ice cream that most people became more talkative: strangely, ice cream thus acted as a truth/trust-enhancing substance. Some other researchers have witnessed the same pattern, when discussing particular and intimate matters. For instance, Herrold (2001) discusses the role of vodka during her interviews while doing fieldwork in Russia. There are of course a lot of differences between an ice cream cone and a bottle of vodka, yet the act of sharing food or drinks with one's interviewees can contribute to trust between interviewer and interviewee.

Few rules were set for the interviews. The goal was not to influence the behaviour of the participants. One rule was that the pick-up would occur at a location of their choice. Interestingly, all the participants chose to meet at the same place, a petrol station very close to the city centre, which is one of the current main nodes of the rúntur. That petrol station is relatively new. The interview only took place in the car while people were cruising. I usually sat in the back seat and asked questions. Answers coming from the drivers were usually quite short compared to those of passengers, mainly because the driver had to focus on his driving down the strip. During an interview, participants drove between four and thirteen times down the strip.

In the second phase of the project and in order to complete the interviews, the participants were asked to take a series of pictures themselves of their rúntur activities, in the absence of the interviewer. Once the pictures were taken, the interviewees were asked to email them to me. These pictures have mainly been used to back up some of the interviews. If something of interest was noticed on the picture, the interviewee would be contacted and further information would be gathered. The picture part of the project helped to understand some particular points of the interviews, but it also showed that the behaviour of the participants was similar as when I was doing the in situ interviews (dancing, laughing, listening to music, etc.). The combination of 'on the move' methods and the photos have turned out to be crucial when trying to understand the dynamics behind young drivers' entry into the regime of automobility.

#### The Rúntur

The diversities of socialities structuring the systemic regime of automobility are quite interesting. As presented by some of the authors above, there are different forms of cruising. To socially and spatially analyse their impacts is extremely important as it reflects the way individuals construct and practice their automobility and its spaces. Even though, cruising is expressed in different forms, there are indeed, striking similarities between the different places the activity happens. Some defining elements of the general definition of car cruising developed by Goldberg (1969) apply to cruising in Iceland. Yet, clear differences can be identified. The activity in Iceland seems to have more to do with mobility and driving than with the car itself, like is the case in some other places (Best 2006). Yet, when looking at how young people describe it, one is forced to admit that the description made by Goldberg is particularly fitting for the spatial set-up. Interestingly, the social activities, such as gazing at people, as described by Þórðarson are also clearly still valid (Figure 1).

Driving slowly up and down Laugavegur [Reykjavík's main street], watching the people; looking at people walking, looking at shops and such. (Male, 18 years old)

In the minds of young drivers there is a clear difference between the *rúntur* and other forms of driving. They make a clear distinction between regular driving, i.e.what you do for transportation and commuting, and other forms of driving. For example biltúr - a common Icelandic term mentioned in most of the interviews –



**Figure 1.** One of the pictures taken by participants on the *rúntur*. (Reykjavík, March 2011, female photographer, 18 years old).

was defined by cruisers as a drive to the countryside with their parents and/or by their parents alone. This is an activity of 'older' persons.

The rúntur is an inherent part of one's learning process of being an autonomous driver. People very often go with their driving instructors, with friends, prior to their own acquisition of a driving licence. Some people also go to cruise, when they are driving trainees, with their parents. Almost everyone takes part in it. If one mentions it to Icelanders, most of them will recall some past rúntur stories and experiences. It is part and parcel of how individuals construct their own automobility. For completing that construction there are certain unwritten rules, such as when and where to go; with whom; how to behave in the strip and during the cruise, etc. Young people involved in the activity know those rules and have to adhere to them. The rules are usually taught before the young people get their driving licence, because most of them have by then been cruising with others.

The rúntur is an activity 'transmitted' between drivers and non-drivers, as an older sibling or a friend with a driving licence will be in charge of the driving. Friends with a driving licence might also ease one's introduction to automobility, teaching him/her the practices that driving schools do not teach. Young drivers-to-be are aware of the benefits of this rite of passage. In a group of friends, for example, the first one to get a driver's licence usually sees his/her popularity suddenly increase, not because of car ownership necessarily, but because he/she can drive them to rúntur. The construction of automobility is therefore not independent; it has to be carried out with the help and acknowledgement of others. That acknowledgement is both spatial (people are using the physical space of the street for their purpose) and social (people displaying their social identity as drivers). It is a performance, a display of one's mobility. The rúntur is a rite of passage, extremely important for both the young drivers and their older siblings. Moreover, that newly minted driver is acknowledged by others as a driver. They are completing each other's construction of automobility, yet it is an individual process. In one interview, one of the participants and one of her friends recalled the following situation:

You think about it [going rúntur] when you get your driver's licence. We thought it was very cool. When my friend got her licence, we just used her. We thought it was just awesome. We were calling her ... She is not that good a friend though ... [Embarrassed laughs] it was also nice to meet her. (Female, 19 years old)

Most of the young people recalled the fact that long before starting to drive, they were looking forward to driving and especially to going car cruising. It is mainly linked to the fact that, parallel to cruising, the age of driving marks the beginning of their passage into adulthood and all that comes with it. When asked about why young people put so much emphasis on cruising, the same respondent said:

I think they [young drivers] feel like grown-ups. That is why they do it so much. The time I got my driver's licence, I just felt I had grown up like 20 years. I felt so mature and then we went cruising. (Female, 19 years old)

When asked what was the difference between that kind of driving and being in a traffic jam, all participants responded that they really disliked traffic jams and that they were 'annoying and a waste of time', whereas the rúntur was fun and a



**Figure 2.** Dancing in the car, music and more dancing in the car. (Photo montage of Participant taking pictures of each other, Reykjavík, April 2011, two female photographers, one 18 years old the other one 17, montage from the author based on the order of the pictures sent to him).

productive activity where they are doing something that they consider 'interesting'. Horns are rarely used during the cruise, unless for interacting with people outside the car. Driving slowly along the main strip is a way to learn how to master the mechanical ensemble that is the car, such as using the clutch, the gears and the brakes. It is a technological learning experience, as one has to be relatively skilled in order to be able to drive extremely slowly without stalling the engine. If that happens, it is considered as a humiliation for drivers, who (as I witnessed) may even be mocked by their passengers for their lack of skills. Some young drivers presented cruising as a way to experience and to explore the city life. Others yet mentioned that *rúntur* was first and foremost about chilling with friends, gossiping and just having a good time. When asked about why they go there, several interviewees pointed out that they were not allowed to go in bars, due to age restrictions. One girl told us that for her it was about (Figure 2):

#### (...) driving around and you imagine that you are partying.

During the cruise, particular places play an important role. There are a few 'mandatory' locations that have to be visited during the activity. One petrol station, open 24/7, adjacent to the city centre, particularly attracts young people, along with some other 24/7 stores. Actually, all the interviews started at this petrol station – at the demand of the interviewees. Ice cream stores are also quite popular. *Rúntur* frequently – but not necessarily – involves ice cream. Sharing food on the cruise is a very popular activity. When asked why, one respondent explained that first this is because ice cream is good, and second, because the ice cream store is another place to meet friends with whom they want to share things. That food sharing does seem extremely important among people in the car.

The *rúntur* moreover provides an opportunity to discuss intimate and private things. People explained that they were going on *rúntur* 'to get away from home, it's a liberty thing'. They needed their own space and the car provided it. Some of the participants mentioned that their parents are actually relieved to see their kids and their kids' friends going out to *rúntur*:

Parents don't want to have a group of teenagers hanging out at their home, so they [the parents] say, 'get out and find something to do'. When they [young people] get their driver's licence, then they have something to do, somewhere to go (Male, 19 years old).

Many people said that they liked the freedom of not being at home. This is the only moment during the interviews that the car itself was mentioned as being extremely important. Almost all of the interviewed people linked their rúntur to a feeling of being at 'home away from home', as one of the participants explained it. That statement is similar to the idea of 'dwelling in movement' developed by Sheller and Urry (2000) and Featherstone (2004). The car gives the youth some kind of privacy to share emotion, pour their hearts out and talk about important things. There is also a certain time for that. The Saturday evening rúntur is more about partying, whereas the one on Sunday is more about sharing. There are exceptions: one participant explained that when she learned her grandmother got diagnosed with cancer, the first thing that she did was to call her friend and go rúntur:

When my gran was diagnosed with cancer, I asked B. to go rúntur. Then we talked about it and I was crying a lot ... and then ... Oh wait there is a cute boy! (Female, 17 years old)

Boy-and-girl matters seem to be discussed quite a lot during car cruising, as illustrated by how the last quote ended. Love, friendship and sex are often discussed. Many of the interviews were interrupted by phrases like 'that's a cute boy' or 'look, a hot girl'. People who are not cruising are scrutinized and talked about, especially 'if there is something to talk about, like if a girl is very slutty' or if the occupants of the car notice someone they know. People cruising also give lifts to their partying friends. During a few of the interviews, we picked up and dropped off people. The cruising friend, thus not drinking, will serve as a taxi driver for his/her partying friends. Strangers are not welcome in the car. You have to at least know one of the persons in the car. That explains the difficulties that were encountered when trying to get people at random for the interviews. Exceptions are made for those strangers who want a ride home, but cannot afford the full-price taxi:

Sometimes people do not want to pay for a taxi. Sometimes they are like ... 'I have 1000 ISK (~ 7\$/6€) can you drive me home?' and you are 'yeah ... ok'. (Female, 17 years old)

In terms of privacy and the car, it is also extremely important for young couple, for an eventual date, or for having sexual intercourse without the risk of being caught by their parents or siblings. One of the places that young couples or people on a date cherish going to is the parking lot at the westernmost tip of the Seltjarnarnes peninsula, where Reykjavík is located, a five minute drive from the main strip. The place, next to an imposing lighthouse, affords spectacular views of the city and the bay. People usually go there to enjoy the view, but also to share intimate moments and even have sex. One of the participants explained that she sometimes went there with her boyfriend, but she also pointed out that she thought that the whole thing was a bit gross in the way that numerous cars were usually parked in close proximity and it was easy for people in adjacent cars to gaze at each other:

You just have to hope that the steam covers the windows quickly ... (Female, 17 years old) (Figure 3).



**Figure 3.** Public display of private space on the parking lot. (Reykjavik, April 2011, male photographer, 18 years old).

The same person explained that some young people on the cruise just go there in order to check what happens (I was in several cars that eventually did just that). This parking lot is mainly used by young heterosexual people. That particular activity within car cruising could be compared to 'dogging' which is having sex in the car for the thrill of being watched, being caught, or of having strangers join (Bell 2006). Yet, contrary to the protagonists in Bell's work, the young people are not having sex in their car because of the thrill of it. They are doing it there because of a certain lack of privacy and space in their own home. The car somehow compensates for that lack. When asked why young couples gathered in that particular place, one young female explained that this is for safety reasons. She felt safer with other young



**Figure 4.** A young couple on the Seltjarnarnes lighthouse parking lot. (male photographer, 18 years old).

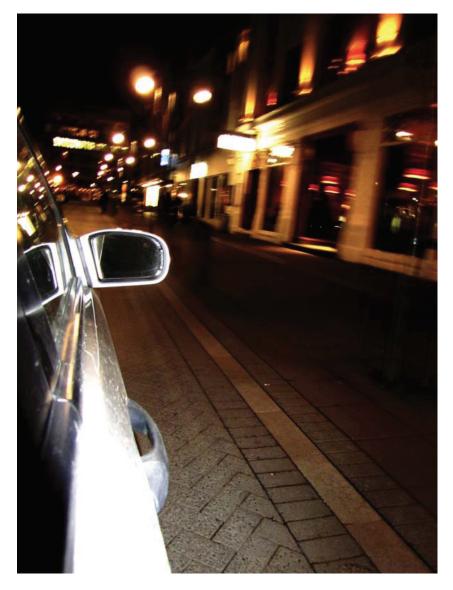
couples around her, than being somewhere else alone, with the risk and the awkwardness of being caught by total strangers (Figure 4).

There is another place in Reykjavík, which attracts older people, couples, homosexuals and bisexuals, people interested in dogging, swinging and other kinds of sexual encounters in public places. Those activities exist outside the rúntur. Young people car cruising sometimes make a small detour to that particular place, 'just to see what is going on'. A few of them reported stories of 'old disgusting taxi drivers banging some middle-aged women'. They also mentioned that on several occasions they saw and watched males having sex together. When asked why they were going there to watch people having sex, they explained that if they had someone to do it with, they would not be wasting time watching other people doing it. Here again, a parallel could be here made with the work of Bell on dogging (2006) and the other meaning given to the word cruising - the action of searching in public places for sexual encounters. Yet, that parallel has to be thought through carefully.

One's construction of automobility is a complex thing. There are no doubts that the rúntur occupies a central place in this process for young people in Iceland. Peer acknowledgement is very important, mainly between different drivers, but also between older peers – who might not even be driving at the moment the activity takes place. In some cases, it might even be 'utilitarian', as one might be used by others, just because (s)he has a driving licence. The construction involves certain places and space where young drivers seem to have to go to; most importantly the strip, the place where they manifest their newly acquired mobility, rendered by the car. Having a driving licence is not enough to gain entry; people have to show that they are now part of the car system. Automobility has to be displayed, and cruising is a way to do so. It is about presenting oneself to the automobile world. It is also about sharing knowledge, experience, practices and places. At first sight, some of the places that young drivers or drivers-to-be visit seem to be quite irrelevant for the construction of automobility, but those places seem to reflect one's entry into adulthood or at least a certain maturity. Young people are looking for places for privacy, where they can share emotions, have sex and discuss things away from their parents, or other grown-ups. It is also a space of socialization, first in terms of socialities: It is about social interactions between the different actors of the cruise. Second, this contributes to their socialization into the regime of automobility. During the cruise, which is a particular moment, they are learning, practicing and experiencing some of the structuring socialities of the systemic regime of automobility. Car cruising is therefore not only about the car, or moving from A to B. It is also about embracing personal, emotional freedom and autonomy. It is about catching and understanding during a particular moment and in a particular place, the socialities of automobility (Figure 5).

### **Cruising within Automobility**

Looking at the use of rúntur by young people in the greater Reykjavík area, we see that the car itself as an object is not central even though some of its mechanical aspects have been mentioned such as the gears, the brake and so on. The rúntur is about mobility and the meaning it carries, and about sociality. It is also a very social activity, whether it is done by walking (like described by Þórðarson) or driving, the central part is the way individuals produce mobilities (Cresswell 2006) and how individuals use them to spatialize themselves (Lefebvre 1999). Extrapolating from



**Figure 5.** The strip. (female photographer, 18 years old).

the Icelandic example and the interviews that were taken, cruising should be defined as leisure activity; a spatial displacement producing mobilities in which individuals find pleasure and enjoyment through social and technological interactions. These are the same pleasure and 'emotions' that have been identified by Sheller (2004).

Once those mobilities are produced, individuals display and use them to spatialize themselves. In other words, automobility is, in the context of cruising about being seen and making spaces, but also about claiming existing spaces, both public and private. Paraphrasing the famous idiom, the spatiality of young people cruising is in the eye of the beholder. Cruising is about externalizing, displaying one's mobility and spatiality. Moreover, this echoes previous ideas about the numerous links between space and mobility and how the latter is one of its main constituents, or as Urry puts it: 'space [...] is constituted through movements and velocities that make that particular defined space' (Urry 2000). In the case of cruising, we also see that

more than mobility is involved in the production of space, appropriation of the space by individuals is also involved/important. Mobility, and particularly driving, is a means of human territoriality (Sack 1986) within the spaces of automobility.

When looking in detail at cruising in Iceland, we observe that, parallel to a certain gain in mobility, the activity concerns one's expansion of his/her living space; the freeing of oneself from domesticity. This is what young people expressed in the interviews. That expansion takes the form of a discovery of the city. Some of the interviewees clearly explained that cruising was an exploration of the city and urban spaces at night; a way to access the urban mobile experience. This did not only concern the rúntur main strip, but the city as a whole, yet that exploration was made during the *rúntur*. That exploration is taken as an opportunity to claim spaces and places. Rúntur, in that perspective can be seen, paraphrasing Sack, as an attempt to affect, influence or control a geographical area; in this case, the places and spaces of automobility. This is an appropriation process, in which places and spaces are being transformed, boundaries are blurred to serve one's best interest as an automobile being. Young people access and affect those spaces and places and assert control over them, and to express power over it; by doing so, they reinforce their status as actors within the systemic regime of automobility, and also contribute to the spatial and social reproduction of the system which will later reinforce their status. During the cruise for example, the street becomes for novice drivers the theatre of their newly acquired automobility; the place where they will be able to exhibit it, to show their newly acquired power. Novice drivers will both make the spaces and places that they encounter during the cruise their own, but they will also durably affect them.

Furthermore, the use that is being made of certain spaces during cruising is quite interesting. Reykjavík's main shopping street is 'redesigned' by cruising. By day the street is as normal as can be, with clear boundaries between the sidewalks and the road. It is the way it has been designed and intended to be. When cruising happens, those boundaries all of a sudden become somehow blurred. One could argue that the road becomes a temporary 'shared space' (Hamilton-Baillie 2008a, 2008b): people walking in front of cars, without fearing for their safety; drivers driving extremely slowly: individuals moving together, flowing collectively in spaces without colliding and yet signifying each other and their surroundings. That is maybe the true essence of automobility and its current technological expression. Taking this a little further, car cruising could be understood as some kind of power contestation of the delimitations and strictures of planning. It may be the reason why the activity is disliked by many city officials and cities around the world, as it challenges the way they conceived and delimit the city and its planning.

Through their newly acquired mobility, young drivers are longing for social interaction and cruising gives them that opportunity. Many of them explained the importance of good company during the cruise, but also detailed the numerous interactions that they have with other cars and/or people that they meet for example at the ice cream stores. Curiously, their relationships are co-dependent. Young drivers need those external agents to eventually be acknowledged as mobile beings by other and more experienced mobile beings. Those last ones represent a social goal. This rite of passage is here, once again, very important, both on a personal level and on a societal/systemic level. It is also very important for the regime of automobility, as it is one of the ways the system is perpetuated or reproduced through human practices.

Cruising is a form of 'sociality on the move'. Paraphrasing Brownlie *et al.* (2007), it combines the enjoyments of the car and driving with an important social activity marking one's first steps within the regime of automobility. The social activity is a part of how young individuals are going to construct themselves as *automobile* beings. That construction is marked by the particularities of the local car culture. The need for autonomy and mobility is not only spatial. The spatial appropriation and its deployments are all parallel to a need for social interaction. Those needs influence how individuals construct and perpetuate automobility. This also shows that social activities such as the one of *rúntur* are an inherent part of how one constructs automobility. It reinforces the social fabric necessary for the systematization of automobility, and the peer-to-peer signification necessary for the regime of automobility to exist and sustain itself.

#### Conclusion

The example of car cruising in Iceland shows the cultural and social constructions and practices structuring the systemic regime of automobility. More work is needed to identify and analyse those constructions. Scholars should consider how activities such as car cruising mirror social practices that go beyond mobile purposes. There is much more to automobility than the car in itself. Being mobile implies a whole set of practices, a large amount of social interactions and more important for us geographers, an impressive display, production of spaces and places. More investigation should be made from a geographical point of view, in order to both encompass the socialities and the spatialities produced by mobility. Those socialities and spatialities occupy an important part in the production of space. The example of car cruising in Iceland shows how particular mobile practices, within the systemic regime of automobility, are at one and on the one hand a personal appropriation of the spaces and places of automobility - which can be understood as a form of human territoriality. On the other hand, it is a transformation-sometimes temporary-of those spaces in order to fit one's particular needs, like for example, those of a young driver in Iceland, entering automobility.

Car cruising is anything but a superfluous activity: It is about being conspicuous; signifying places and making spaces and vice versa. Sociality in those processes plays a key role as it helps to insert oneself into the regime of automobility. In the context of the *rúntur* in Iceland, the social interactions between cars, young drivers and their older peers form the core of how individuals position themselves within the regime of automobility. It is a group dynamic based on socialities, but also on how people use things and mobility to create and relate to spaces, the car here being central.

### Acknowledgements

I would like to thank Karl Benediktsson, Edward H. Huijbens and Tim Richardson for their comments, and Hanne Krage Carlsen for her translations of the passages from Ofvitinn, as well as her comments. I would also like to thank the two anonymous reviewers for their constructive comments. Finally, the author expresses his gratitude to the Department of Cultural and Economic Geography of the University of Göteborg for their help and support.

#### References

- Armstrong, K. A., and D. A. Steinhardt. 2006. "Understanding street racing and 'hoon' culture: an exploratory investigation of perceptions and experiences." Journal of the Australasian College of Road Safety 17: 38-44.
- Bell, D. 2006. "Bodies, technologies, spaces: on 'dogging'." Sexualities 9: 387-407.
- Best, A. L. 2006. Fast cars, cool rides: the accelerating world of youth and their cars. NewYork, NY: New York University Press.
- Böhm, S., Campbell, J., Land, C., and Paterson, M., 2006. Introduction: Impossibilities of automobility. The Sociological Review 54: 1–16.
- Brownlie, D., P. Hewer, and S. Treanor. 2007. "Sociality in motion: exploring the tribal consumption among cruisers." In Consumer Tribes, edited by B. Cova, R. V. Kozinet, and A. Shankar, 110-128. Oxford: BH.
- Clarle, J., S. Hall, T. Jefferson, and B. Roberts. 1993. "Subcultures, Cultures and Class: A Theoretical Overview." In Resistance Through Rituals: Youth Subcultures in Post-War Britain, edited by S. Hall, T. Jeffersson, 9-74. London: Routledge.
- Collin-Lange, V., and K. Benediktsson. 2011. "Entering the regime of automobility: car ownership and use by novice drivers in Iceland." Journal of Transport Geography 19: 851-858.
- Cresswell, T. 2006. On the move Mobility in the Western World. London: Routledge.
- Dant, T. 2004. "The driver-car." Theory Culture & Society 21 (4/5): 61-79.
- Edensor, T. 2004. "Automobility and national identity." Theory, Culture & Society 21 (4/5): 101-120.
- Featherstone, M. 2004. "Automobilities, an introduction." Theory, Culture & Society 21 (4/5): 1-24.
- Gofman, S., 2002. "Car cruising: One generation's innocent fun becomes the next generation's crime." Brandeis Law Journal 41 (1) 1-31.
- Gofman, S., 2004. Car and driver. The End of Cruising [Online]. Available from: http://www.caranddriver.com/features/the-end-of-cruising (Accessed January 1, 2010].
- Goldberg, T., 1969. "The Automobile: A social Institution for Adolescents." Environement and Behaviour 1 (2): 157-185.
- Hamilton-Baillie, B. 2008a. "Shared place: reconciling people, places and traffic." Built Environment 34: 161-181.
- Hamilton-Baillie, B. 2008b. "Towards shared space." Urban Design International 13: 130-138.
- Herrold, M. 2001. "Which Truth? Cultural Politics and Vodka in Rural Russia." Geographical Review 91 (1/2): 295-303.
- Hornstra, B. 2006. The roots of rúntur. Amsterdam: De Russen.
- Latimer, J., and R. Munro. 2006. "Driving the social." The Sociological Review 54: 32-53.
- Leal, N. L., B. C. Watson, and M. King. 2007. Hooning offenders and offences: who and what are we dealing with? Melbourne: Australasian Road Safety Research, Policing and Education Conference.
- Lefebvre, H. 1999. La production de l'espace [The Production of Space]. Paris: Editions Anthropos/ Editions Economica.
- Lumsden, K., 2009. "Do we look like boy racers?" the role of the folk devil in contemporary moral panics." Sociological Research Online, 14 (1): 2. http://www.socresonline.org.uk/14/1/2.html.
- Lumsden, K., 2010. "Gendered performances in a male-dominated subculture: 'girl racers', car modification and the quest for masculinity." Sociological Research Online, 15 (3): 6. http://www.socresonline.org.uk/15/3/6.html.
- Lupton, D. 1999. "Monster in metal cocoons: 'road rage' and cyborg bodies." Body & Society 5:
- Miller, D. 2001. "Driven Societies." In Car Culture, edited by D. Miller, 1-33. Oxford: Berg.
- O'Dell, T., 2001. Raggare and the panic of mobility: modernity and everyday life in sweden. In: Miller, ed. Car cultures. Oxford: Berg 2001, 101-132.
- Rajan, S. C. 2006. "Automobility and the liberal disposition." The Editorial Board of Sociological Review 54: 113-129.
- Redshaw, S. 2007. "Articulation of the car: the dominant articulation of racing and rally driving." Mobilities 2: 121-141.
- Redshaw, S. 2008. In the company of cars: driving as a social and cultural practice (human factors in road and rail transport). London: Ashgate.
- Sack, R. D. 1986. Human territoriality: its theory and history. Cambridge: Cambridge University Press. Sheller, M. 2004. "Automotive emotions, feeling the car." Theory, Culture & Society 21 (4/5): 221-242.

### 18 V. Collin-Lange

Sheller, M., and J. Urry. 2000. "The city and the car." *International Journal of Urban and Regional Research* 24 (4): 737–757.

Sheller, M., and J. Urry. 2006. "The New Mobilities Paradigm." *Environement and Planning A* 38: 207–226.

Urry, J. 2000. Sociology beyond societies: mobilities for the twenty-first century. London: Routledge.

Urry, J. 2004. "The 'system' of automobility." Theory, Culture & Society 21 (4/5): 25-39.

Vaaranen, H. 2004. "The emotional experience of class: interpreting working-class kids' street racing in Helsinki." *Annals of the American Academy of Political and Social Science* 595: 91–107.

Vaaranen, H., and N. Wieloch. 2002. "Car crashes and dead end careers: leisure pursuits of the Finnish subculture of the *kortteliralli* street racing." *Young* 10: 42–58.

Þórðarson, Ó. 2001. Ofvitinn. Reykjavík: Mál og menning.

### **Paper IV**

"Do you wanna go for a ride?": Automobility, individuation, spacings and car cruising in Iceland

# "Do you wanna go for a ride?": automobility, individuation, spacings and car cruising in Iceland

Virgile Collin-Lange

(Submitted to *Transfers: Interdisciplinary Journal of Mobility Studies*)

### **Abstract**

Gilbert Simondon claimed that the individual is never a given in advance but that he/she must be produced; the individual must 'coagulate', or come into being, in the course of an on-going process. This work explores how individuals produce and project themselves into spaces through a particular mobile experience. It looks at how young drivers use automobility as a medium to spatially *individuate* themselves as *automobile* beings. In that process, emotions are key structuring elements as they are the foundation of the sense of actions. Through the example of car cruising in Iceland, which is a rather mundane activity, we will see that the system of automobility is a metastable one. Furthermore automobility appears to be a transductive activity deeply affecting a person's "spacings" and the overall importance of mobility within an individual's own 'spacings" processes. This work is based on several years of methodological investigation of Icelandic novice drivers but a special focus is here made on "on the move" interviews taken among young drivers while they were cruising. The results of the interviews show the existent parallel dynamics between mobility and space and indicate that when it comes to spacings, it is all about mobility.

### **Keywords**

Automobility, individuation, spacing, car cruising, Iceland

### Introduction

"Rúnturinn in Reykjavík is sweet to many
The boys drive in the evening sun, looking at doves
Young girls with flair and style
Want to be in the backseat"

("Sumarið í Reykjavík" (*The summer in Reykjavík*), Bubbi Morthens, 1989, transl. by Hanne Krage Carlsen).

To the external observers, the lining up of cars on a week-end night on Laugavegur, Reykjavík's high-street, seems to be just another traffic jam on one of the busiest streets in Iceland's capital. For the locals, this is the rúntur: the local version of car cruising. Car cruising in Iceland is an interesting part of the local car culture. The cruise is an activity appreciated by a majority of young people (Collin-Lange, 2012; Collin-Lange & Benediktsson, 2010). The phenomenon of the rúntur is far from recent and can be traced back at least for a century. At that time the car had not arrived yet in Iceland. Instead, the rúntur was organised around walking. Author Þórbergur Þórðarson (2001 [1940]) described it as a flow of young people walking around in the city centre of Reykjavík. Today it is an element of the car culture in Iceland, constituting an important part of the local car system and being one of the 'non-transportative' car-based activities in which young Icelanders indulge. Very little work has been done on 'nonregular driving activities' especially the ones not related to any particular kind of crimes or road incivility. Car cruising is an example of that and the activity is either disregarder or just judged conspicuous. However, we researcher interested in question of mobilities, should put a special interest in those peculiar forms of mobility as they are very often mirror greater expectations and carry intriguing social, spatial meanings. The focus on youth too is important. Very often, studies of mobilities have been exploring the dangers caused youth and their mobility. Those studies are very focused on their immaturity, dangerousity, and their inexperience, within a particular mobile context. The present paper is a call for more research on the mundane, yet peculiar mobile practices of a mundane youth exempt of the regular ageism. Their mobile practices might be subversive and concern only a sub group, but they also concern a greater public as one mobilities is never singularized. It is a complex interlinkage of mundane and sometime subversive mobilities, actors and practices. We have a lot to learn from those mobilities.

Cruising is popularly defined as driving "aimlessly" up and down and main strip, during weekend nights. More than a simple drive down a street, the activity carries a multitude of meanings and is emotionally charged, as one can see from the opening quote, which is part of a popular song in Iceland. As explored in this paper the *rúntur*, is not only about driving but is also, among other things, about love and, as well, emotional and social engagement with others. The rúntur is neither only about driving nor about the car. It encloses a whole range of emotions which are structuring elements of what it means to be an "automobile being" (Collin-Lange, 2012) or how these being are going to individuate themselves as such and consequently space themselves in relation to objects and others.

The overall aim of this paper Is to explore how automobility, individuation and spacing are interlinked. First, this work considers the way in which individuals individuate themselves, through particular socio-spatial practices within the systemic regime of

automobility, as automobile beings: individuals whose mobile potential has been maximized and who can thus autonomously move within their own spacings (Malbon, 1999). That individuation is simultaneously personal and collective; it is also social and spatial and contributes to the sustaining of the systemic regime of automobility. Second, the paper will investigate how the individuation process affects one's own spacings. In other words, what this work aims to expose is the importance of mobility – to a great extent automobility – to one's individuation, both personal and collective, and second to one's spacings in the world. With this investigation, the aim is to expose the complementary links between being and spacing and how it boils down to a pure and simple question of mobility. This will be done through the example of Icelandic novice drivers and their car cruising habits. This work is based on several *in situ* interviews realized among young driver whilst they were cruising, complemented by participant and non-participant observation.

This paper first briefly presents the methods used for fieldwork and situates them within mobility studies. Second, it then scrutinizes the links between emotionality and the system of automobility. It engages with the metastability of the system and shows that this metastability creates the necessary conditions for one's own individuation. Thirdly, the example of young drivers in Iceland and their cruising practices is presented and interpreted in terms of individuation. Finally, the paper explores the links between transduction and spacings and elucidates how a person's individuations influence one's own production of spaces. My goal here is to show the importance of mobility in spacemaking processes.

### Methodologies 'on the move'

This work is based on participant and non-participant observations and other data collection undertaken over a period of four years. Methodologically, research on automobility has been conducted in a classical way, with emphasis on structural features. It has been mainly concerned with the car system itself and its structure (Büscher & Urry, 2009; Sheller & Urry, 2000; Urry, 1999, 2002a, 2002b, 2002c, 2004) and how its different components are interlocked. For this project, such an approach soon turned out to be very limiting. A more dynamic approach was needed in order to catch the particular 'mobile moments' that compose automobility and the inherent dynamics of car cruising. The answer was found in Büscher and Urry's (2009) call for new methodologies "on the move". According to them, researchers have to experience the mobility of their subjects of study themselves. The reasons behind the use of such methodologies are multiple and can be situated somewhat parallel to the theoretical development of the concept of automobility. As the limitations of conventional methods became apparent, some scholars (e.g. Sheller, 2004) began to explore the emotionality of cars, which has opened up new possibilities. Automobility thus becomes an emotional phenomenon, about feeling a certain form of technology and sensing a certain form of movement (Bull, 2004; Sheller, 2004). Pursuing this further, researchers such as Sheller and Urry have called for a "new mobility paradigm" (Sheller & Urry, 2006). They have declared that mobility should be approached in a more dynamic way and have encouraged researchers to try out new methods for researching mobility. As argued before, automobility constitutes a whole set of power relations and types individuals; it defines social and spatial status, it is an intimate and private thing, and in addition, the researcher has to approach people when they are on the move, which is a big problem when research and researchers are immobile. "On-the-move" methodologies, are in this approach, innovative and challenging. They force researchers to both think and act outside the box, thus opening a world of possibilities for future research.

The methodology included in situ and "on the move" interviews of people while they were cruising in their car. It was an opportunity for me as a researcher to experience directly the mobility of my subject of studies and also to avoid the usual storytelling one might experience while interviewing people on their mobile practices. Interviews were only taken when people were on the move. The original plan was to randomly approach people from the street, hailing those involved in car cruising during weekend nights, but this failed. It appears that car-cruising is a very intimate activity and young people involved in the activity are not willing to let anyone, even friendly researchers, get into their car. The methods were thus redesigned accordingly. Contact was made with a potential driver, who was supposed to inform me shortly beforehand when he/she intended to go cruising. The driver and I met at a location of the driver's choice. Interestingly, all the participants chose to meet at the same place; a petrol station in central Reykjavík, which is one of the main nodes of the rúntur. The driver could bring some friends along. In all cases, drivers were accompanied by at least one person. Some picked up friends during the interviews. Those friends also took part in the interviews. Answers coming from the drivers were usually quite short compared to those of the passengers. This was mainly due to the fact that the driver had to focus on his/her driving down the strip. In this way, 14 interviews were undertaken with young people, 7 males and 7 females, aged between 16 to 21 years old. They were from different parts of the capital area. Most of them were upper secondary grammar school students (gymnasium level), but some were working fulltime. Most of the participants had a driving licence. Several were about to get one and one had just started driving school. Most of the participants owned a car and if this was not the case, a parent's car was used for cruising. Participants drove between 4 and up to 13 times down the strip (I gave up at round 13, being too car sick to conduct the interview). Some fears about privacy were expressed by the 14 participants, and on several occasions the author had to reiterate the fact that he was neither spying on them for their parents nor working for the police. Trust had to be earned and people were concerned about eventual intrusion and disruption of their private life. It is also important to note that most of the participants became more confident and talkative once the interviewer bought them ice cream.

The use of "on-the-move" methodologies has given very interesting results, but they are challenging and clearly depend on the positioning of the researcher, who also partially hands over the fate of his own research to someone else (for instance when waiting to be contacted on weekend nights, or entering a stranger's car and going for a drive). The eventual power relations between the interviews were also quite different. I felt that the interviewee, especially if he/she was driving, was more confident in his answers and more willing to share private details. Furthermore, the process appears to be more about spacing oneself. That spacing both concerns the researcher and the interviewees but also the subject of study. The use of these methods is a very good way to understand the spatial dynamics inherent to the subject of study as the researcher follows him/her into the spaces encountered and can observe how the subjects of study react in those spaces.

### **Emotional automobility**

The relationship mobile subjects have with their means of mobility are complex and rich in emotions. When it comes to automobility it is tempting to see drivers in their cars as inert beings, caged in their metal boxes, emotionally detached from their surroundings. The links between automobility and emotions have yet to be fully understood, especially when trying to understand how individuals use things and mobility in order to produce and space themselves. In her writing on emotions and cars, Sheller (2004) has explored the links between emotionality and the car within automobility. Based on her previous work with Urry on automobility (Sheller & Urry, 2000), she presents the idea that "motion and emotion [...] are kinaesthetically intertwined and produced together through a conjunction of bodies, technologies and cultural practices" (Sheller, 2004, p. 227). That conjunction of bodies, technologies and cultural practices is an essential part of the way automobility has been defined. It also produces what I shall call pleasurability, or how through one's personal emotional engagement with automobility leads to making it an activity from which one experiences pleasure, thus reinforcing the emotionality itself. Furthermore, exploring the linkages between mobility, materiality and emotions, Sheller argues that:

emotional relations between people are simply mediated or expressed through things ... but that kinaesthetic investments (such as walking, bicycling, riding a train or being in a car) orient us toward the material affordances of the world around us in particular ways and these orientations generate emotional geographies (Sheller, 2004, p. 228).

Those emotional geographies are projected into the world as the sense of actions (Simondon, 2001, 2007). It has to be noted that "crucial to the recognition of the materialities of mobilities is the re-centring of the corporeal body as an affective vehicle through which we sense place and movement, and construct emotional geographies" (Bondi, et al., 2005; Crouch, 2005 in; Hannam, et al., 2006). Simondon (2007) claimed that emotions allow the individual to be oriented in the perceptive world. They are the "sense of action" (2007, p. 109). That is, emotions give the necessary understanding that individuals must have about the world and the sense emotions give to them. This is echoed in the work of Sheller (2004). The question here is how emotions and emotionality contributes to automobility. When it comes to automobility, those sense-giving emotions or emotional geographies are extremely important. They are the starting point for one's individual and collective individuation as an automobile being. For Simondon, individuation is the process by which any individual comes into being. Individuations are based on socialities, and emotionalities. They are systemized.

When Sheller and Urry introduced and systemized the concept of automobility (Sheller & Urry, 2000; Urry, 2004), they defined it as a "complex amalgam of interlocking machines, social practices and way of dwelling, not in a stationary home, but in a mobile, semi-privatized and hugely dangerous capsule" (Sheller & Urry, 2000, p. 739). Their original formulation of the concept pointed to a certain determinism underlining the potential entropy of the system, in other words, they immediately underlined the weaknesses and self-destructive potential of the system of automobility, both for the system itself but also for the society in which that system dwells. Their systemic analysis has as well highlighted the structures and various actors of automobility. Furthermore,

some researchers have exposed the "power relations that make the system possible" (Böhm et al., 2006b, p. 6, italics in original text) and presented automobility as a "regime".

These power relations are extremely important when it comes to accession to automobility. The underlining point here is how the system empowers its users - that empowerment may be social or spatial; how it integrates the users and how the system is going to perpetuate itself, feeding on its users' need for power. This is how the system sustains itself. It is its structuring point, between its actors, ruling institutions and agencies. This is for the users a mobile opportunity. In other words, it is about a person's motility which has been defined as one's own mobile potential (Beckmann, 2000; Flamm & Kaufmann, 2004; Freudendal-Pedersen, 2007; Kaufmann, Bergman, & Joye, 2004). The ones who are not able to seize that opportunity would find themselves excluded. The systemic regime of automobility is a form of social capital (Mohan & Mohan, 2002) that can be mobilized by its users. This system can be understood as a "latent potential" (Simondon, 1992, p. 300). That latent potential both comes from the individuals and their aspirations as active actors within the system; and the system in itself giving its users the potential frame for realizing their mobile and social capital. This will modulate a person's individuation as an individual and collective mobile being (Simondon, 2007).

Simondon stated that "individuation must be thought of as a partial and relative solution, manifested in a system that contains latent potentials and harbours a certain incompatibility with itself; an incompatibility due at once to the forces in tension as well as to the impossibility of interactions between terms of extremely disparate dimensions" (1992, p. 300). He is presenting the condition of individuation, but if we look closer at what he stated we can see that it corresponds quite well with how automobility has been systemized and defined. The systemic regime of automobility is entropic, meaning that because of its inherent structure, it is destroying itself and its surroundings to a great extent, as is implied in Sheller and Urry's definition. That entropy exposes the structural weaknesses of the system induced by the autonomy, the motion and the empowerment the system offers to its users. This is the incompatibility that Simondon is talking about. It creates structural and systemic tensions and echoes the idea of power and regime developed by Böhm et al., (2006). These tensions are inherent in the structure of automobility.

The tensions generated within the system pivot between two 'poles': the socialities and spatialities generated by the system itself. It relies on both to function properly. The system has to balance itself between them. On the one hand, we have socialities which range from simple one-on-one interaction to complex collective group dynamics, and both come from inside the system as well as outside. On the other hand, we have spatialities, which encompass all the places, spaces and spacings produced for and by the system and favouring the actors of the system. The spatialities also help the system in itself to be coherently structured, properly function and to perpetuate itself and eventually expand. The system needs to create the necessary social conditions for individuals to modulate themselves. It also needs the spaces in which that modulation happens. These are not easily produced. They are conditioning the accession and the expansion of the system. Yet one has to bear in mind that that conditioning depends on three things. First, a person's socialities depend on multiple factors: they are polymorphic and multi-dimensional. The same can be said of a person's spatialities.

Second, socialities and spatialities are highly dependent on each other as there are no socialities without spatialities and vice versa. Finally, while being complementary, they are also in opposition to each other.

Curiously, too few researchers (Lumsden, 2009, Lumsden, 2010, Best, 2006, to mention a few) have been working on the socialities of automobility. Mainly centred on the car, automobility has sometimes been stamped with the bad image that its main means of technology is carrying and their users as individualistic and asocial beings, caged in their metal boxes (Lupton, 1999), leaving little room for social interaction. The socialities of automobility in that perspective, strictly attached to the car, are limited to its inside and concentrated to a very personal and intimate level. It seems as if little room has been left for the different social interactions between users of the system. The way the socialities have been considered echoes the way in which the spatialities of the system have been understood. There again, those socialities are either trapped in the car – the car being a sort of closed spatial cocoon, an intimate and personal space where one can dwell unexposed to the rest of the world, or delimited by the structural design of the street. The systemic regime of automobility is composed of clearly compartmented, hierarchized spaces. The street as one of the main places of happening of automobility is a perfect example of this. Its spaces are clearly delimitated for and by automobility. When it comes to emotional links operating within the socialities and spatialities within the systemic regime of automobility, we are forced to see that perhaps things are not as closed and compartmentalised as they seem. For example, when it comes to dwellings, it can easily be argued that the play and display of emotions goes beyond one's windshield as drivers have to engage with all kinds of others and that their spacing is ubiquitous and poly-topical (Stock, 2007) meaning that it happens in different spaces at the same time.

Automobility is composed of a complex set of practices. They are an important part of how individuals compose their own automobility. Emotions are however little acknowledged, as they are seen to endanger the entropy of the system. They humanize it and make it more open and thus more sustainable, showing that the system does not only depend on materiality but also on socialities. Following that line of thought and confronting it with Simondon's on metastability and automobility is a metastable systemic regime individuating people into automobile beings, we find that the metastability of the system is exposed by its inherent tensions but those tensions are in fact just the transductive elements of the system, meaning that they ease one's insertion into the system. This is what Simondon calls transduction (1992, 2007). He describes it "as a process of ontogenesis, the making anew of a domain in reiterative and transformative individuations" (Dodge & Kitchin, 2005, quoting Simondon, 1992, p. 313). Furthermore it is "[t]he simplest image of the transductive process which is furnished if one thinks of a crystal, beginning as a tiny seed, which grows and extends itself in all directions in its mother-water. Each layer of molecules that has already been constituted serves as the structuring basis for the layer that is being formed next, and the result is amplifying reticular structure" (Dodge & Kitchin, 2005, p. 170, quoting Simondon, 1992, p. 313). This is how the system reproduces itself and how it produces its own individuals, how the system is modulated by mobility. When it comes to the social, this is an operation that allows individuals to locate themselves within a social structure and within spaces. Transduction depends entirely on the tensions of the system incorporating individuals. It propagates itself from member to member, from one location to the other. It is what's going to produce individual automobile beings.

Looking in the ways a system, like the one of automobility, sustains itself is interesting, as it reflects the inherent social structure of the system itself. Emotions are here a key element. They are the fuel that individuals need to insert themselves into a system which both shapes individuals but also uses them as prime resources. In the case of the system of automobility, the metastability of the system creates the necessary conditions for its practitioners to access transductive practices that will at the end reinforce the system. These practices are in our case social activities that go beyond purely transportative uses of the car. The system is about socially and culturally transmitting automobility between users. Emotionality and mobility combined with the metastability of the system create the necessary condition for the transduction and genesis of the individual as an automobile being.

# On cruising, individuation and becoming an *automobile* being

"Rúntur is a funny thing. It is a funny word."

(Male, 19 years old)

Car cruising is a good example of transduction processes. The academic interest in cruising goes back some decades. One of the earliest academic definitions of the activity dates from 1969 and rightfully describes the activity as "nothing more elaborate than driving down a popular boulevard, watching the people on week-end nights" (Goldberg, 1969, p. 164). Those involved would interact with each other, sometimes car-calling, some using horns, revving the engines and flashing the lights, watching each other, smiling and flirting (Goldberg, 1969). Usually people involved in the activity drive slowly in a file down a popular street, called 'the strip' and then turn around and drive back the same way. The activity is often repeated several times. Drivers may eventually meet during the cruise in some hang-out place situated not far away from the strip; usually an adjacent parking lot, a petrol station or a store (Goldberg, 1969).

Generally, cruising has been presented through the car, (Best, 2006; Goldberg, 1969; Lumsden, 2009; O'Dell, 2001; Vaaranen, 2004), the problems cruising causes (Gofman, 2002-2003, 2004) or the questionable behaviour and social disturbances car cruising may eventually create (Falconer & Kingham, 2007; Lumsden, 2009, 2010; O'Dell, 2001; Redshaw, 2007; 2008). Little has been done on the mobility aspect of the activity. Furthermore, the activity cannot be reduced to a particular form of mobile technology, as there are other forms of cruising that do not include cars. In Iceland, the *rúntur*, the cruise, existed long before the arrival of the car, as described in the literary work of Pórðarson (2001). Cruising should be regarded exclusively as a form of mobility and the car just as one of its multiple expressions. A lot of focus has been put on the materialities and not enough on the activity as mobile experience. The word cruising in itself implies a physical displacement, a signified movement and social interactions. Cruising is a particular form of mobility and whatever materialities may be involved within the process, at the end, is a collective and personal mobile experience. Young people in Iceland echo more the personal mobile experience than the material one.

When asked to define the *rúntur*, one of the interviewees explained and stressed the importance of driving and how it is a learning opportunity.

"People are just driving around [...] It is more a practice of how to drive and be a driver than how to *rúntur*." (Male, 19 years old)

Young people have a quite clear idea of what the *rúntur* is and they clearly differentiate it from regular driving. The young people in the study drew a clear distinction between traffic jams and car cruising, the latter being the "one [traffic jam] you are asking for" (female, 19 years old). Another, when asked about it, pointed at the street and the car in front of her and said: "there is more life here" (female, 20 years old).

Cruising is about being mobile and looking for a particular outcome that may be sex, love, social interactions or simply inserting oneself into the status of automobility. It is an elaborate form of driving that goes beyond simple transportative needs. To be able to reach that outcome, individuals have to behave in a particular routinized way, in particular places and in accordance with particular social rules. The role of other individuals in the activity is rather important, as they will be both undergoing and completing each other's cruising experience or there will be one person acknowledging one's cruise and reward the cruiser with his/her inherent goal. It shows how one activity such as cruising propagates between its different potential users in a transductive way, contributing to the participant's individuation.

The individuation process is a very important phenomenon. It is both a personal experience and a collective one. It is about finding oneself, but also situating oneself within a particular group dynamic. A system like the one of automobility would not exist without the multiple individuations of its users making this system possible. Automobility depends on the collective relationships of its users. This is what lies, for example, behind its exclusive and inclusive nature. Individuals have to acknowledge each other as drivers or as non-drivers, but also the infrastructures and institutions involved in the activity. It is both formally and informally made. Individuals have to build collectively a coherent spatial network enhancing their own mobility. This inter-individual relationship is in fact, as Simondon puts it, "the coherence of a systemic of individuation incorporating individuals in a larger unity" (Simondon, 2007, p. 229). It is at the same time both one's personal and collective individuation. One of the interviewees clearly stated this particular point when she explained:

"I am really happy for them [the new young drivers on the *rúntur*]. They can do it on their own. Welcome to the club ... You are taking part in something bigger than you". (Female, 19 years old)

That "something bigger" has to be earned somehow and the person has to go through a particular set of practices and rites, mostly legal ones, such as the ones of getting a driving licence, attending a driving school and thus learning and respecting the inculcated rules. It is a rather classical and standardized path when looking at how modern society works. However, there is something quite interesting in the process of how individuals transmit the *automobile* activity between each other, through their activities. The transmission may also be a legal one, such as when one driver-to-be starts to assist driving with his/her parent(s), or any other responsible person transmitting

his/her kinetic knowledge, savoir faire and social knowledge of automobility to the inexperienced learner. All those interviewed had been cruising before, either with an older sibling, a friend, a parent or even their driving instructor, thus showing the cultural and generational importance of the activity. It is a transmitted learning experience.

The transduction process seems to go on from one generation to another. This transduction describes quite well the way in which automobility socially and spatially sustains and propagates itself from one user to the next. It also shows the importance of the interdependency within automobility between the different involved actors. The transduction process is sometimes quite well structured. One interviewee stated:

"The *rúntur* is like a tradition that goes through generations. You just grow up with it. Sometimes I take my little sister. It is just me and her and we go down Laugavegur. She really likes it." (Female, 18 years old)

Several of the interviewees came accompanied with one of their younger siblings or with a friend who was either learning how to drive or was thinking of starting to learn, which was very often discussed. Technical advice was sometimes given and newcomers' stories were eventually shared. Most of the interviewees stressed the importance of driving and having a licence. Those who do not have a driving licence have much respect for and envy of their older siblings or driver-friends for having a licence to drive. It seems somehow that one's popularity rating depends on one's driving possibility, as one participant explained:

"It [getting a driving licence] was never a question whether you did it or not. You just do it. I don't understand people who didn't do it right away. I took my first class on my 17<sup>th</sup> birthday. ...Then you notice that when you get your driving licence, you become very popular." (Female, 18 years old)

Emotions in the transduction and individuation processes are a key factor. This importance has to be thought of in parallel with the quest for pleasure and enjoyment that structures the systemic *regime* of automobility. As Simondon said, emotions are the centre of actions; they are the key elements that are going to make individuals act upon things. A great number of the social and cultural studies on automobility have been centred on the car and its 'pleasurability'. However, few have looked at the pleasure induced by automobility itself, by the act of socially and spatially moving oneself within that particular system. Pleasure can be found in many ways. Some mentioned the 'freedom' of driving around, others enjoyed the private spaces rendered by the car in which they could share and conceal their emotions, date, have sex and so on. People explained quite often that the car was like home, an experience they quite enjoyed. One stated:

"It [the *rúntur*] is a great experience. You start chilling out, you can be yourself. You don't have to be all dressed up or anything. It is like sitting at home talking with your friends. You are home away from home." (Female, 19 years old.)

Oddly, for an activity that does involve cars, the vehicle itself – the make, model, speed and size – did not seem to matter that much for most of the interviewees. They seemed to find more pleasure in driving than in the car. When taking interviews with young drivers during car cruising, one might expect the car to occupy a central role within the activities. Only one of the interviewees, who was a member of a website dedicated to modified cars and cruising, mentioned that the type of car you were driving was important and that he really enjoyed "nice cars". Most of the respondents talked quite negatively about those who were too focused on their car. Several females, for example, explained they would never, especially not on the rúntur, talk to or try to engage with someone who had a "too nice" car as "those guys are selfish, they don't have time for you, the car takes it all". The same girls did mention, however, that they enjoyed watching young boys doing burns and racing at one of the parking lots situated along the cruise strip. When asked about it, they explained that they enjoy the noise, the smell of burned tyres, and to see cars driving fast, because "it is just so much fun". When asked to explain their words, she said: "I don't know - there is something about it. This is power. There is something sexy about fast cars" (female, 18 years old). Girls who were mainly interested in the actual car were also depreciated. During several interviews, the author was introduced to the concept of biladrusla- 'car-slut' - which describes a girl that is only interested in a person's car and "whose self-esteem is as low as her skirt is short", as one of the male interviewees worded it. On one hand, those girls should be avoided at all cost, as they are only interested in your car and not attracted by your personality or true self:

**Interviewer:** Is the kind of car you drive while cruising important?

**The driver (Male, 20 years old):** "Yes...uh...actually no. I have a Subaru Legacy and I just use the humour of it. It's a crap car. That [the humour] works rather well [talking about picking up girls]."

**Girlfriend of the driver (Female, 19 years old):** "He has had all kinds of girls in that car. It all depends on the quality of the girl. If the girl is quality, it really should not matter what kind of car you drive."

**Driver (Male, 20 years old):** "I have had no quality girls, and soon you realize you don't wanna waste more gas on them. So just tell them to get out!"

(Younger girls, inexperienced about cars, aged between 15 to 18 years and without a driving licence, were often mentioned as not really interested in the driver but more by the car)

**Passenger in the same car (Male, 18 years old):** "Some girls like it if they are young, not so smart – then they love it [nice cars]. They will just jump in the car."

**Driver (Male, 20 years old):** You know they think they know stuff about cars but (...).

On the other hand, girls are also an easy target if one is looking for rather stress-free sexual encounters while being on the cruise. Car cruising in Iceland has much to do with

love and sex, and the cruise is often a good opportunity for young people to date and/or have sex. Quite a few participants did mention their love and/or sex life during the cruise and said they were talking about it a lot as they felt that the car was a safe space. Males were keener on sharing information about their eventual car-based sex life than girls. They often did it in front of other friends in the car, including female ones. Young males often actually initiated that part of the conversation. Girls were just then sharing their points of view or experience on the matter, if it came up during the interviews. One male interviewee explained it in the following way:

"You pick up the girl to go for ice cream. There is no dating scene [in Iceland]. There is just a sex scene. The car is a good place to go. Just you and her. Do whatever you want to do. The dirtier...yeah... whatever... [laughing]." (Male, 18 years old)

During the cruise, emotions here are projected far beyond the windshield of the car. Overall, it can be noticed that it seems that driving around and taking part in the cruise, with friends, family members, a date or even alone gives comforting feelings and emotions. Those are both on a personal level, as a fellow may enjoy driving by himself and so on, but also on a collective level, as it is often a pleasure shared with eventual passengers or even a potential date. It is all about pleasurable mobility. The pleasure does not come from the object itself, i.e. the car, but from mobility experienced by the subject displaying a form of newly acquired adulthood. One respondent explained that when she started to go on the *rúntur*, she felt she just grew up several years at once.

The rúntur exposed the social and spatial individuation inherent to the systemic regime of automobility. The activity shows how individuals such as young drivers in Iceland insert themselves into the mobile social fabric through social interactions like the one older driver had with younger and unlicensed ones, while driving down Reykjavík's main shopping street on a Saturday evening. Car cruising is also an opportunity for young drivers to become part of the dominant transport system. Few of the respondents clearly expressed that in their answers. Car cruising was for them kind of an act of normalisation of oneself within that dominant transport system. Perhaps that is why the activity is so popular, as it is a rite of passage, both from a personal point of view but also from a more general perspective. The rúntur seem to be an activity that allows its participants to space themselves on a personal and societal level. Car cruising both marks one's own personal individuation which is based on the pre-individual (Simondon, 1992) and on the context one finds him/herself in. It is also a collective individuation conditioned by the group dynamic inherent in that same systemic regime in which each individual needs to acknowledge each other, hence allowing the system to perpetuate itself properly. The participants not only acknowledge each other as drivers but also as automobile beings in a systemic way. At the end, "the process of individuation results in a modulation in condition of the person and his or her milieu" (Dodge & Kitchin, 2005, p. 170). Individuation locates the individual. It is an opportunity for individuals to insert themselves into the spaces and socialities of automobility structured by society. Transduction here is only the process by which it happens.

This is a perpetual process, as one's individuation is never totally done and has to be permanently readjusted to the system's demands. When individuals cannot sustain those demands any longer, they will find themselves cast out of the system, thus losing their social/spatial status. When it comes to the question of spacing, the example of the

practice of *rúntur* clearly shows how individuation, mobility and spacings are deeply interlinked. *Rúntur* and the rather curious blend of personal and collective individuations, emotions and mobility have very interesting consequences for individual spacing.

### **Transductive spacings**

For Derrida (2002), Malbon (1999) and Massey (2005) spatial considerations call for a more subject-based approach to spaces. In that sense they join Lefebvre in his writings on spaces of representation. They all show that spaces denote the dynamic and collective processes used by individuals to create, produce and sustain spaces in which they locate themselves. Spacings, as I have been using the term, define the processes by which individuals create spaces. The take of Simondon on the individuals and the way he conceives their genesis is interesting as it contributes to the understanding we have of space. Simondon states that a person's individuation is parallel to spacing oneself within his/her milieu. The individual construct is part of the space making process. Interestingly, few of the participants during the interviews expressed things similar to what Simondon claimed in his writing about individuation. One young male particularly explained that he saw the *rúntur* as first a way of becoming himself a young driver, and only second, as a way to explore the city as a whole and to acquire a spatial experience which will contribute to his identity as a driver. In that case, driving and car cruising together mean spacings. It constitutes the individual accessing spaces:

"First, when I started to drive with my parents, I did it only in the suburbs, this is where I learned. Then when I got my driving licence, I went more alone into the city centre. I went cruising. It is like you explore the city on your own. You learn the city like that." (Male, 19 years old)

Recent developments in mobility studies have called for a more dynamic approach to the subject and its by-products (Sheller and Urry 2006; Büscher and Urry, 2009). The term spacing encloses the dynamism and helps to deal with the spatial questions created by mobilities. There is a strong relation between mobility and individuation. They are tied together into particular material spatial practices that not only allow individuals to experience space *in situ* – in an immediate present – but also to physically and socially project themselves and go beyond that immediate present. Spacing is here the process by which these things happen. Some of the activities young people engage in particularly expose this approach.

Very early on, the impacts of automobility on spaces were lamented, not least because of the voracious spatial appetite of the automobile (Sheller & Urry, 2000). As explained above, automobility is a metastable system where one particular form of materiality and mobile practices affects how and which spaces are going to be produced and reproduced (paraphrasing Hannam, Sheller, & Urry, 2006) and shape individuals. Individuation and spacing are collective processes as is equally the systemic regime of automobility. The transductive processes constituting automobility are parallel to the process of creating spacings. As Massey stated, "space is produced through social relations and material practices" (1994, p. 254). The constitutive element of those social relations is transduction. However, we should add mobility to the equation, and the

example of Icelandic novice drivers taking part in car cruising allows us to do so. I presented the metastability of automobility and the fact that transduction structures itself as a partial and always incomplete solution to a relational problem, thus making one's spacings an on-going process. "It gains its form, function and meaning" (Dodge & Kitchin, 2005, p. 171), through transductive practices. Automobility is the best example of this. The case of the *rúntur*, which due to its popularity, at least in the capital Reykjavik, is a rather mundane thing, shows the importance of everyday transductive practices in one' own spacings. These transductive practices are best witnessed when one enters the activity. Young drivers entering the regime of automobility are going to experience those practices for the first time, which is going to make them somehow more extreme. That may well be why activities like car cruising are so popular among young people.

### Spacings on the move

Going for a car ride on a Saturday night in Reykjavik has more consequences than might be expected. It may lead the participant through a collective and personal journey within the path of automobility, generate emotions, and produce 'on-the-move' emotional geographies. Through the example of the *rúntur* in Iceland, non-transportative activities within the systemic regime of automobility produce many things, such as pleasure, emotions, and socialities that, in the end, seem to be structuring elements of the system. The example of car cruising in Iceland is a good demonstration of the fact that those non-transportative activities are a key element in the structuration of the system. Young people involved in car cruising are demonstrating while cruising. Social science researchers should be put onto these activities as they seem to produce the pleasures and enjoyments that hold the system together. The car here is just a medium; driving, as a particular form of spatial displacement and of mobility, is the important thing, and consequently the corporeal, emotional, social and spatial pleasures it induces.

Automobility in itself is a collective mobile experience, based on a very personal experience and context – social, spatial, and should be detached from any particular form of materiality (Böhm et al., 2006). The goal here is not to deny the fact that individuals use objects to enhance their own self and constitute their identities (Dant, 2004; Kaufmann, 2004; Miller, 2001a, 2001b, 2008), but to show that, when it comes to automobility, what should matter is the context in which one finds him- or herself and the emotional and corporeal satisfaction one gets from it. Automobility is and should be built by the collective, for the collective. It is a common mobile experience which shapes individuals both personally and collectively.

Individuals, through their personal and collective mobile experiences, generate themselves as mobile beings and consequently their spacings. The two are co-constitutive: without spacings, no individuation; without individuation, no spacings. It is a permanent mediation, as it is a never ending dynamic process which is driven by the metastability (Chateau, 2008; Simondon, 2001, 1992, 2007; Stiegler, 2003) of the system. Automobility is the perfect example, in which individuals build to sustain their becomings and their spacings. One can imagine the dancer on stage from the introduction of this paper, the baby in her mother's womb pushing his/her feet against her mother's placenta or the young Icelandic driver driving down the main street of

Reykjavík on a Saturday night. They all have something in common; they are on the move, thus they are spacing themselves. Spacings begin when mobility starts.

### **Acknowledgements**

The author wishes to dedicate this paper to the young people cruising in Iceland, looking for life to happen. The author wishes to thank Karl Benediktsson, Edward Huijbens and Tim Richardson for their comments. Hanne Krage Carlsen deserves a special mention for her immeasurable help, along with the people from the Department of Cultural Geography and Economic Geography of the University of Gothenburg. Last, but not least, the author wishes to thank Gunnar Thorarensen for his support.

### References

- Beckmann, J. (2000). *Heavy Traffic Paradoxes of a modernity mobility nexus*. Paper presented at the 'Research seminar on Mobility'.
- Beckmann, J. (2004). Mobility and safety. Theory, Culture & Society, 21(4/5): 81–100.
- Best, A. L. (2006). Fast Cars, Cool Rides: The Accelerating World of Youth and Their Cars. New York & London: New York University Press.
- Bianchi, A. Summala, H. (2003). The "genetics" of driving behaviour: parents' driving style predicts their children's driving style. *Accident Analysis & Prevention*, 36: 655–659.
- Blackshaw, T. (2005). Zygmunt Bauman. Abingdon & New York: Routledge.
- Bonss, W. Kesselring, S. (2004). Mobility and the cosmopolitan perspective. Online discussion paper presented at Workshop at the Munich Reflexive Modernization Research Centre, (SBF 536). Retrieved at: http://www.mobilitypioneers.de/Dokumente/download/November%202004/B3\_Workshop\_0104\_Dokumentation.pdf [Accessed on the 23<sup>rd</sup> of May 2010]
- Bondi, L., Smith, M. and Davidson, J. D. (2005). *Emotional Geographies* London: Ashgate Publishing Limited
- Brownlie, D., Hewer, P., and Treanor, S. (2007). Sociality n Motion: Exploring The Tribal Consumption Among Cruisers. In Cova, B., Kozinets, R. V., and Shankar, A. (Eds.), *Consumer Tribes.* 109–128. Oxford: BH.
- Bull, M. (2004). Automobility and the power of sound. *Theory, Culture & Society*, 21(4/5): 243–259.
- Büscher, M., and Urry, J. (2009). Mobile methods and the empirical. *European Journal of Social Theory*, 12(1): 99–116.
- Böhm, S., Campbell, J., Land, C., and Paterson, M. (2006a). *Against Automobility:* Social Scientific Analyses of a Global Phenomenon Hoboken: Wiley–Blackwell.
- Böhm, S., Campbell, J., Land, C., and Paterson, M. (2006b). Introduction: Impossibilities of automobility in Böhm, S., Campbell, J., Land, C., and Paterson, M. (Eds.),

- Against Automobility: Social Scientific Analyses of a Global Phenomenon: 1–16, Hoboken: Wiley–Blackwell.
- Böhm, S., Jones, C., Land, C., Paterson, M. (2006). Conceptualizing Automobility: Part 1. Introduction: impossibilities of automobility. In S. Böhm, C. Jones, C. Land and M. Paterson. (Eds.). *Against Automobility*: 2–16. Oxford: Blackwell Publishing.
- Carrabine, E. L., Longhurst, B (2002). Consuming the car: Anticipation, use and meaning in contemporary youth culture. *Sociological Review*, (50): 181–196
- Celle, S. (2006). Communicating Place: Methods for Understanding Children's Experience of Place. Stockholm: Acta Universitatis Stockholmiensis / Stockholm Studies in Human Geography.
- Chateau, J.–Y. (2008). Le Vocabulaire de Simondon. (The vocabularies of Simondon). Paris: Ellipse.
- Collin-Lange, V., & Benediktsson, K. (2011). Entering the system of automobility: Car ownership and use by novice drivers in Iceland. *Journal of Transport Geography*, 19(4), 851–858.
- Collin-Lange, V. (2012). Socialities in motion: automobility and car cruising in Iceland. Published in *Mobilities*. DOI:10.1080/17450101.2012.743220 (Currently available only online).
- Creswell, T. (2006a). On the Move. Mobility in the Western World. New York: Routledge.
- Creswell, T. (2006b). "You cannot shake that shimmie here": producing mobility on the dance floor, in *On the move: mobility in the Western world*: 123–146, New York: Routledge.
- Crouse, D. W. (2000). The real cost of the automobile: a report on recent research. Bulletin of Science, Technology and Society, 20(5):366–378.
- Dant, T. (2004). The driver-car. *Theory Culture & Society*, 21(4-5), 61-79.
- Dant, T., Martin, P. J. (1999). By car: Carrying modern society. *Manchester University, Dept. of Sociology.*
- De Certeau, M. (1984). The practice of Everyday Life: University of California Press, LTD.
- Deery, H. A. (1999). Hazard and risk perception among young novice drivers. *Journal of Safety Research*, *30*(4): 225–236.
- Derrida, J. 2002. Différance. Ed. Engelmann, P. Det lille Forlag.
- Dodge, M. and Kitchin,, R. (2005), Code and the Transduction of Space, Annals of the Association of American Geographers, 95(1): 162 –180
- Dunn, J. A. J. (1999). The Politics of automobility. The Brookings Review, 17(1): 40–43.
- Dunn, R. (2005). 'Doing' qualitative research in human geography. In Hay, I. (Ed.), Qualitative Research Methods in Human Geography. Melbourne: Oxford University Press.
- Falconer, R., & Kingham, S. (2007). 'Driving people crazy': A geography of boy racers in Christchurch, New Zealand. *New Zealand Geographer*, 63(3), 181-191.

- Featherstone, M. (2004). Automobilities, an introduction. *Theory, Culture & Society*, 21(4/5): 1–24.
- Ferguson, S. A., Williams, A. F., Chapline, J. F., Reinfurt, D. W., and De Leonardis, D. M., (2001). Relationship of parent driving record to the driving records of their children. *Accident Analysis & Prevention*, 33: 229–234.
- Flamm, M., Kaufmann, V. (2004). Operationalising the concept of motility: A qualitative exploration. *Mobilities*, 1(2): 167–189.
- Fotel, T., and Thomsen, T. U. (2004). The surveillance of children's mobility. Surveillance and Society, 1(4): 535–554.
- Freudendal–Pedersen, M. (2007). Mobility, motility and freedom: The structural story as analytical tool for understanding the interconnection. *Swiss Journal of Sociology*, 33(1): 27–43.
- Goldberg, T. (1969). The Automobile: A social institution for adolescents. *Environment and Behaviour*, 157-185.
- Gofman, S. (2002–2003). Car cruising: one generation's innocent fun becomes the next generation's crime. *Brandeis Law Journal*. 41(1): 1–31.
- Gofman, S. (2004). The end of cruising. Retrieved at http://www.caranddriver.com/features/04q2/the\_end\_of\_cruising-feature [Accessed January 1, 2011].
- Grand, M. Thrift, N., (Ed.), (2000) *Thinking Space,* Critical Geographies. Routledge, London & New York.
- Hagman, O. (2003). Mobilizing meanings of mobility: Car user's constructions of the goods and bads of car use. *Transportation Research Part D, 8*: 1–9.
- Hagstofa Íslands (2012). Mannfjöldi 1. janúar 2012. *(Population at the beginning on the 1st of January 2012)*, Hagstofa Íslands: Reykjavík. (In Icelandic)
- Hagstofa Íslands (2012). Skrásett ökutæki í árslok 2011. (Registered motored vehicles at the end of the year 2011), Hagstofa Íslands: Reykjavík. (In Icelandic)
- Hagstofa Íslands (2011). Skrásett ökutæki í árslok 1986–2009. *(Registered motored vehicles at the end of the year 1986-2009),* Hagstofa Íslands: Reykjavík. (In Icelandic)
- Hannam, K., Sheller, M., and Urry, J. (2006). Editorial: Mobilities, immobilities and moorings. *Mobilities,* 1(1), 1–22.
- Henderson, J. (2006). Secessionist automobility: Racism, anti–urbanism, and the politics of automobility in Atlanta, Georgia. *International Journal of Urban and Regional Research*, 30(2): 293–307.
- Jain, J., Guiver, J. (2001). Turning the car Inside out: Transport, equity and environement. *Social Policy and Administration*, 35(5): 569–586.
- Kaufmann, V., Bergman, M. M., and Joye, D. (2004). Motility: Mobility as capital. *International Journal of Urban and Regional Research*, 28(4): 745–756.

- Kingham, S., Pearce, J., Dorling, D., Faulk, M. (2008). The impact of the graduated driver licence scheme on road traffic accident youth mortality in New Zealand. *Journal of Transport Geography*, 16(2): 134–141.
- Koshar, R. (2004). Cars and Nations. Anglo–German perspectives on automobility between the world wars *Theory, Culture & Society*, 21(4/5): 121–144.
- Kvale, S. (1996). Interviews: London: Sage.
- Latimer, J., and Munro, R. (2006). Driving the social. In Wiley–Blackwell (Ed.), Against Automobility: Social Scientific Analyses of a Global Phenomenon: 32–52.
- Laurier, E. (2004). Doing office work on the motorway. *Theory, Culture & Society*, 21(4/5): 261–277.
- Lefebvre, H. (1999). *La Production de l'Espace*. Paris: Editions Anthropos / Editions Economica. (In French)
- Lochlann Jain, S. S. (2002). Urban errands, the mean of mobility. *Journal of consumer culture*, 2(3): 419–438.
- Lumsden, K. (2009). 'Do We Look Like Boy Racers?' The role of the folk devil in contemporary moral panics. *Sociological Research Online*, *14*(1), 15.
- Lumsden, K. (2010). Gendered Performances in a male-dominated subculture: 'Girl racers', car modification and the quest for masculinity. *Sociological Research Online*, 15(3), 11.
- Lupton, D. (1999). Monster in metal cocoons: "Road Rage" and cyborg bodies. *Body & Society*, *5*(1), 57-72.
- Malbon, B. (1999). *Clubbing dancing, ecstasy and vitality*. London and New York: Routledge.
- Massey, D.B. (1994) Space, place, and gender. Minneapolis: University of Minnesota Press.
- Massey, D. (2005). For Space. London: Sage Publication Ltd.
- Merriman, P. (2009). Automobility and the geographies of the Car. *Geography Compass*, 3(2): 586–599.
- Miller, D. (2001a). Car Cultures: Oxford: Berg Publishers.
- Miller, D. (2001b). "Driven Societies". In Miller, D., (Ed.), *Car Cultures*: 1–34. Oxford: Berg Publisher.
- Miller, D. (2008). The Comfort of Things. Polity: Cambridge.
- Mogensen, Á., Sigvaldason, S., Jónsson, R., and Baldursson, J. (2000). *Ungir Ökumenn:* Yfirlit yfir ráðstafanir til að fækka slysum. (Young Driver: Overview of recommandation for reducing accidents), Reykjavík: Rannsóknarnefnd Umferferðaslysa. (In Icelandic)
- Mohan, G., and Mohan, J. (2002). Placing social capital. *Progress in Human Geography*, 26(2), 191–210.
- O'Dell, T. (2001). 'Raggare and the Panic of Mobility: Modernity and Everyday Life in Sweden' *Car Cultures* in Miller, D. (Ed.), *Car Cultures*: 105–132 Oxford: Berg Publishers.

- Rajan, S. C. (2006). Automobility and the liberal disposition. *The Editorial Board of Sociological Review*, 54, 113–129.
- Redshaw, S. 2007. "Articulation of the car: the dominant articulation of racing and rally driving." Mobilities 2: 121–141.
- Redshaw, S. 2008. In the company of cars: driving as a social and cultural practice (human factors in road and rail transport). London: Ashgate.
- Sack, R. D. (1986). *Human Territoriality: Its Theory and History* Cambridge: Cambridge University Press
- Sheller, M. (2004). Automotive emotions, feeling the car. *Theory, Culture & Society*, 21(4/5): 221–242.
- Sheller, M., Urry, J. (2000). The city and the car. *International journal of urban and Regional research*, 24(4): 73–757.
- Sheller, M., Urry, J. (2003). Mobile transformation of "public" and "private" life. *Theory, Culture & Society*, 20(3), 107–125.
- Sheller, M. (2004). Automotive emotions, feeling the car. *Theory, Culture & Society*, 21(4/5), 221-242.
- Sheller, M., Urry, J. (2006). The new mobilities paradigm. *Environment and Planning A*, 38(2): 207–226.
- Shrurmer–Smith, P., Hannam, K. (1994). Worlds of Desires, Realms of Power: A Cultural Geography. London: Arnolds.
- Simondon, G. (2001). Du Mode d' Existence des Objets Techniques. (The mode of existence of technical objects) Paris : Aubier Philosophie.
- Simondon, G. (1992). The Genesis of the Individual. In Cary, J., and Kinter, S. Z. (Eds.). *Incorporations*: 297–319. New York: Urzone Inc.
- Simondon, G. (2007). L'individuation psychique et collective. (Pyschic and collective individuation) Paris: Aubier Philosophie.
- Stiegler, B. (2003). The theatre of individuation: Phase-shift and resolution in Simondon and Heidergger. Parrhesia . 7: 46–57
- Stock, M. Lussault, M. (2010), "Doing with space": towards a pragmatic of spaces, Social Geography, 5: 11–19.
- Urry, J. (1999). Automobility, car culture and weightless travel. University of Lancaster. Retrieved at Automobility, car culture and weightless travel [Accessed on the 23<sup>rd</sup> of January 2009]
- Urry, J. (2000). Sociology Beyond Societies: Mobilities for the Twenty–First Century. London: Routledge.
- Urry, J. (2002a). Inhabiting the car. Department of Sociology, Lancaster University. [Accessed on the 26<sup>th</sup> of November 2008] http://www.lancs.ac.uk/fass/sociology/papers/urry-inhabiting-the-car.pdf
- Urry, J. (2002b). Mobility and proximity. Sociology, 36(2): 255–274.

- Urry, J. (2002c). *Mobility, time and the good life.* Paper presented at the Ville en Movement [Accessed on the 18th of September 2009] http://www.ville-en-mouvement.com/telechargement/040602/paris.pdf
- Urry, J. (2004). The "System" of automobility. *Theory, Culture & Society*, 21(4/5): 25–39.
- Vaaranen, H. (2004). The emotional experience of class: Interpreting working-class kids' street racing in Helsinki. [Proceedings Paper]. *Annals of the American Academy of Political and Social Science*, 595: 91–107.
- Þórðarson, Ó. (2001). Ofvitinn. Reykjavik: Mál og Menning.

## **Appendices**

The following two articles – a published conference paper on methodological questions, and a completed manuscript about environmental issues – are not part of the dissertation. They are included here as they are closely related to the main research project.

### **Appendix 1**

# "Að rúnta" in Reykjavík: Exploring mobilities, spaces and methodologies

Virgile Collin-Lange

(Published in *Pjóðarspegill: Rannsóknir í félagsvísindum XII, Félags- og mannvísindadeild*. Háskóli Íslands, pp.623–629)

All communicative transactions of these people on the Cruise took place in some sort of sign language. It was a beautiful language which we tried hard to understand and we did at last – and then some – after a long walk through this serious evening-school of life (Þórðarson, 2001, p. 175).

Mobility is a curious thing. Some have claimed that it is what makes us human. It is a language in itself, a form of communication. Mobility signifies movements (Creswell, 2006). As soon as we attach meaning to the smallest physical displacement, it becomes mobility. These meanings are used by individuals to signify themselves.

The quote above is from the semi-autobiographic novel *Ofvitinn* written by the Icelandic author Pórbergur Pórðarson, which describes a scene happening around 1909 (Pórðarson, 2001). The author describes what he calls "the *Rúntur*". People *were* used to gathering downtown in Reykjavik and walking around. He gives a pretty clear description of what, where and how the *rúntur was* and what people were doing:

"We were always sure to see plentiful supplies of women down on the Cruise, not one or two, but a whole warehouse. In those days, there were two Strip rounds, the smaller Cruise and the larger Cruise. The smaller Cruise went around Austurvöllur Square. The larger Cruise, however, went from the north-west corner of Hótel Ísland, then south along Aðalstræti, East on Kirkjustræti, North by Pósthússtræti and then west on Austurstræti to Aðalstræti. A slow current of men and women moved along the Cruise from nine to eleven and sometimes even 12 at night" (Pórðarson, 2001, p. 175).

The Cruise, as Þórðarson puts it, is a particular form of mobility. The phenomenon is far from being dead. Today, anyone taking a stroll in downtown Reykjavík on a weekend night will notice that there is something particular going on. Cars lined up, driving slowly down Laugavegur, Reykjavík's main shopping street. This is the actual modern version of *rúntur*. The phenomenon experienced by Þórðarson a 100 years ago, is still happening. Only the methods have changed. Car cruising, *rúntur* in Icelandic, is a major socio-cultural phenomenon for young people and especially for novice drivers (Collin-Lange & Benediktsson, 2010). This form of social driving represents for Icelandic novice drivers almost a rite of passage, a "must do" when entering Iceland's car culture. It represents an opportunity for them to perform their newly licenced identity as

automobile beings (Collin-Lange & Benediktsson, 2011). That performance usually goes beyond the simple mobile purpose, as it is often associated with spatial, social, emotional and even sexual exploration.

Iceland is a car nation. The country's car culture is striking. The planning in the Capital area has been organized and centralized around the car (Reynarsson, 1999). But those are only structural reasons and Icelanders' automobility goes beyond these structural reasons. The matter is far from being simple and involves social, cultural and generational reasons. It is about the meaning that people in Iceland give to their own mobility. What are their values and what do they attach to them? What role does it play in their social lives? How is it used by people who define themselves as mobile beings? How is it used to approach and signify one's own surroundings? The question is how to research these non-structural reasons. How can we capture those moments in which individuals express their auto-mobility? How do we explore those spaces used and displayed by mobile individuals?

Recent research on mobility studies has claimed that in order to understand what mobility is really about, the research methods have to be `on the move' (Büscher & Urry, 2009), researchers have to experience themselves the mobility of their subjects. Following that line of reasoning, the author carried out several interviews of young people while they were car cruising in Reykjavík. The same young individuals were also compelled to do a self-directed photographic project. These types of methodologies have been shown to be crucial, not only for capturing the activities of young people involved in rúntur, but they also represent an opportunity to catch a certain type of spatiality. The aim of this work is to present these methodologies and to show that when it comes to researching mobility and spaces, researchers have to question their own mobile and spatial settings and to challenge their own positionality. This paper aims to explore that and to show the importance of new methodologies for researching mobilities. This work is therefore presented in a semi-autobiographical style, as it is based on the author's methodological tribulations while exploring rúntur -car cruisingin Reykjavik. First, this paper explores different aspects of mobility and automobility and the results of the interviews will be briefly presented. The full results are presented in two other papers so that the aim of this present work is not to present these results. The second part explores the past and current theories about mobile methodologies and how these methodologies offer an opportunity to understand how people space themselves, which is our third and final part.

### **Moving**

Since 2007, I have been researching car culture and mobility in Iceland, with a special focus on young drivers. This work has been done for my Ph.D. in geography. The main concept of this work is automobility (Sheller & Urry, 2000; Urry, 2004) The term has been primarily defined as "the individualized movement of persons through space by means of a particular form of technology" (Collin-Lange, Submitted for publication), that particular form of technology being the car. It is a disputed term, as some attach it only to the car (Hannam, Sheller & Urry, 2006; Sheller & Urry, 2000; Sheller & Urry, 2006; Urry, 1999, 2002, 2004). Presented as a system, the concept is defined as "a complex amalgam of interlocking machines, social practices and ways of dwelling", defined by 6 key points (Urry, 2004) which includes "humans, machines, roads and

other spaces, representations, regulatory institutions and a host of related businesses and infrastructural features" (Edensor, 2004, p. 102).

Some have called for a broadening of the concept. That call is based on several criteria. First, the centrality of the car within the concept has been criticized and some have claimed that there are other forms of automobility than the car-based ones: "the car is only a particular universality, a particular regime of automobility" (Böhm, Campbell, Land & Paterson, 2006a, p. 6; Collin-Lange, Manuscript in press-a) and as hegemonic as cars are, "there are automobilities that do not depend upon the car". (Böhm et al, 2006a, p. 6). In that way, we have re-centred the concept of automobility around its main components: transport technologies, autonomy and mobility.

Second, the same authors wished to bring out "the power relations that make that system possible" (Böhm et al, 2006b, p. 6). In other words, they wished to present the inherent dynamics of automobility. Adding to that conception, I have written that automobility should be considered as a form of human territoriality, showing the spatial logic of the *regime*; "the way individuals use automobility for accessing spaces and places and act upon them" (Collin-Lange, Manuscript in press-a). Automobility provides its practitioners with an opportunity to access, control and influence spaces; to reproduce them and to create new ones. Being part of the regime of automobility gives the opportunity to create, stabilise and enhance one's own social and spatial potential. Paraphrasing Skeggs (in Sheller & Urry, 2006; Skeggs, 2004). Automobility sorts individuals into "those who have the means to be mobile and thereby be part of the space of flows and those who do not" (Fotel & Thomsen, 2004, p. 536), and produces spaces and places that can be either inclusive or exclusive.

Overall, automobility has been defined in a very utilitarian way. Activities within automobility that did not seem to produce anything were doomed to be left behind. Nevertheless, some of those activities revealed in some cases crucial aspects of the way people construct and practice their automobility. Car cruising for example has been completely disregarded. It has been considered as something that disrupts the "from A to B" conceptualization of automobility, thus it has been reduced to a futile form of mobility. It did not fit the utilitarian conceptualization of automobility. It does not produce anything concrete as people just seem to be driving around conspicuously. Nevertheless, the activity is well known all over the world but poorly documented. Iceland is no exception.

Rúntur is an important activity in Iceland and when asked about it, a great number of people reveal that they are either go cruising on a regular basis or have done it before. A study conducted in 2007 revealed that more than 75% of young drivers in Iceland were cruising on a regular basis (Collin-Lange & Benediktsson, 2010). With further investigations, it appeared that car cruising is a crucial element of how young people in Iceland construct their automobility. interviews that I have conducted during the period from July 2010 to July 2011 with young drivers in the greater Reykjavik area revealed that car cruising is about being acknowledged by others as an automobile being, as a licenced driver. It is a social and spatial display of one's new acquired automobility. It is considered by many as an exploration; a physical exploration of the city space and for many an opportunity to run away from their own (pre-adult) domesticity but also to step into adulthood. The activity, mediated by the car, offers young people a great

amount of space for friendship, fun and intimate relationships (Collin-Lange, Manuscript submitted for publication-b). Mobility is a personal matter. This is the difficulty faced by many researchers. How do we capture that personal phenomenon?

### Methods on the move

Automobility has been approached in very static way and explored in a structural way. It was concerned with the car system in and of itself and its structure (Dunn, 1999; Urry, 1999) and how its different components are interlocked. Nevertheless, those approaches turned out to be limited as they did not provide a sufficient amount of information regarding what is behind a person's automobility. Other fields had to be explored. Some people began to explore the emotionality of cars (Sheller, 2004) and opened up new possibilities. Automobility became something emotional. It was about feeling a certain form of technology and sensing a certain form of movement (Bull, 2004; Sheller, 2004). Following that path, researchers such as Sheller and Urry called for a new mobility paradigm (Sheller & Urry, 2006). They declared that mobility should be approached in a more dynamic way and enticed researchers to look for new methods researching mobility. Researchers could not explore mobility without being mobile themselves. Büscher and Urry (2009) then claimed that researchers have to experience themselves the mobility of their subject in order to understand it. Nevertheless, this created certain issues. Since automobility constitutes a whole set of power relations and it sorts individuals, it gives a social and spatial status. It is also an intimate and private thing. In addition, the researcher has to catch people when they are on the move, which can be a huge problem when research and researchers are immobile.

Back in 2007, when I began to research young drivers in Iceland I did not have a driving licence. I was an enthusiastic car-free commuter. For me, cars were just plain annoying. Alternating between biking, roller blading and walking, I was pretty much happy with my personal level of mobility. At that time, the aim of the project was to try to understand the high level of car use in Iceland and eventually to try to tackle it with some "revolutionary" ideas. The methodological design of the research project was according to that particular plan. During the first phase of the research a questionnaire was made and submitted. Questionnaires are useful, give you plenty of information; they also allow you to keep a good distance between yourself and your subjects. Nevertheless, parallel to that submission time, my mobile fate had changed and I had to move for several months to the north of Iceland, six hours drive from Reykjavik, and due to that relocation, I had to undergo the process of getting a driving licence (Collin-Lange, Manuscript submitted for publication-a). Thus I found myself in an interesting situation; first, because I had to attend the driving school, which gave me first-hand access to young people and young drivers, second because I myself became one of my subjects of study. I had to readapt my methods. In addition to becoming myself a young driver, I gained a social and spatial status. I became automobile. It also gave me a greater understanding of what I was studying. It is in that new context, inspired by Sheller and Urry (2006) and Büscher & Urry (2009), that I began to study the rúntur in Reykjavík. I decided to interview young people involved in car cruising. When designing the methodologies I decided to explore myself particular on-the-move methodologies as they appeared to be innovative and challenging in a way that forces researchers to both think and act outside the box, thus opening a world of possibilities for future research. The first part of the methodology included in situ interviews: in the car and "on the move" interviews of people while they were cruising. I was sitting in the car, with them, as a passenger. The goal here was to disturb the activity as little as possible. For this particular part, I did 14 interviews with young people, 7 males and 7 females. They were from different parts of the capital area. Most of them were upper secondary grammar school (gymnasium level) students. Most of the participants had a driving licence. One of them was about to get it.

These *in situ* interviews were made when people were car cruising in Reykjavík. Contact was made with one potential driver, who was supposed to inform me when he was going cruising with a 30 minute warning, at least. He could bring some of his friends with him. In all cases, drivers came accompanied with at least one person. Some of them picked up friends during the interviews. Those friends also took part in the interviews. The original plan was to randomly approach people from the street, involved in car cruising during weekend nights, but this totally failed. It appears that car-cruising is a very intimate activity and young people involved in the activity are not willing to let anyone, even friendly researchers, get into their car. The methods were thus redesigned accordingly. The same fears were expressed by the 14 acquainted participants, and on several occasions, I had to reiterate the fact that I was neither spying on them for their parents, nor working for the police. Trust had to be earned and people were concerned about eventual intrusion and disruption of their private lives. It is also important to note that most of the participants became more confident and talkative once the interviewer bought them ice cream.

Few strict rules were set for the interviews. The goal was not to disturb the habits of the participants. One rule was that the pick-up would occur at a location of their choice. Interestingly all the participants chose to meet at the same place, which is one of the main nodes of the *rúntur*; a petrol station situated downtown. The interview only took place in the car while people were cruising. The interviewer usually sat in the back seat and asked questions. Answers coming from the drivers were usually quite short compared to the ones given by the passengers, mainly due to the fact that the driver had to focus on his driving down the strip. Participants drove between 4 and up to 13 times down the strip.

In the second phase of the project, the same participants were asked to take a series of pictures of their "rúntur" activities in the absence of the interviewer. The pictures have mainly been used to back up some of the interviews. Participants took up to 10 pictures. Most of them were taken during the cruise down the strip itself. Others were describing activities parallel to the strip. The pictures turned out to be quite interesting, as they confirmed many of the things that young drivers hinted at during the interviews.

The blend of the two methods has given extremely interesting results. Those methods are challenging and clearly depend on the researcher's positionality. It became very difficult to hand over the fate of the course of your own research to someone else (such as waiting to be contacted on weekend nights, going into a stranger's car). Nevertheless, the whole process helped to clearly link theories and new "on the move" methodologies. It appears to be more about spacing oneself, (that may be the researcher or the subject of study) than studying it. It is about catching the process of becoming mobile.

### **Spacing**

Spacings differ conceptually from spaces in that the former are explicitly never finished, always open to negotiation and thus always in a process of becoming (Malbon, 1999, p. 64).

Being mobile is a learning process, as Pórðarson puts it so nicely in his description of the rúntur. It is about learning how to be mobile among others. I also see it as an opportunity to create a space for oneself within a cultural, social and physical context. Automobility is a good example of that. More than being a mere form of mobility, it is, as pointed out by many, a form of power, a set of social relations (Böhm et al., 2006b; Sheller, 2004; Sheller & Urry, 2000). Getting a driving licence and beginning to drive is more about social gain, than a mobile one as it marks a teenager's first step into adulthood. That spacing is a perpetually evolving process (Malbon, 1999). This is what makes it difficult to research. This is where "on the move" methodologies become useful for geographers and social scientists as these methods seem to be without certain limitations. The methods themselves are in fact an on-going process and offer the opportunity to capture on-going moments. Previous methodological approaches revealed themselves to be limited as they were only catching an instantaneous moment in an individual's mobile spam. They also kept the researchers away from their subjects of study. Thus, the new mobility paradigm and the call for new methods have affected the researcher's own position. They call for more personal involvement but also represent a challenge, as researchers have to consider their own position within their own research. Reflexivity at its best. It becomes a methodological experience.

Furthermore, researchers have, in this way, been obliged to experience for themselves their own theories and their content. In my own case, getting a driving licence, going car cruising with young people, and taking a stand on automobility was also a way to personally experience automobility. Acquiring a driving licence during the process has been crucial in terms of access to research material, as it gave me the necessary status-social and/or spatial - to perform the role of researcher. More than a form of empowerment, I see it as an opportunity of spacing oneself within my own research. In a previous work on automobility, I wrote that automobility should be considered as a form of human territoriality. Methodologies "on the move" are key components to access the mobile territories rendered by automobility. We could see those methodologies also as a form of human territoriality. A way for researchers to gain access to certain spaces, controlled and used by their subjects, but also to create and establish their own positionality and gain from it.

For many young people, to *rúnta* in Reykjavik is a personal, social, intimate, physical and cultural experience. The results of the survey showed that young people go car cruising to explore and experience what the nightlife of the city has to offer. As the protagonists of Þórðarson, they are there to learn in the evening school of life. Studying those processes is extremely important, as they are representative of the values people in Iceland attach to cars. It demonstrates that the structural reasons used by many only represent a small section of a much more complex and particular automobile set-up. Entering the *regime* of automobility is not an easy task. Getting a driving licence is just an administrative step within this *regime*. The important thing is to display one's newly acquired status and get acknowledged as a driver and enter the *automobile* community. The *rúntur* in Iceland offers that opportunity to young people. It is a

signified movement; mobility in its pure state. It is a spatial statement, a power display. We researchers have to catch that movement, study the signification processes and finally embrace those new forms of mobility, as it is what makes us human after all.

#### **Acknowledgements**

The author wishes to particularly thank Hanne Krage Carlsen for the translation of *Ofvitinn,* Gunnar Thorarensen for his never ending support and of course my supervisors for their support.

#### References

- Bull, M. (2004). Automobility and the power of sound. *Theory, Culture & Society,* 21(4/5), 243-259.
- Büscher, M., & Urry, J. (2009). Mobile methods and the empirical. *European Journal of Social Theory*, 12(1), 99-116.
- Böhm, S., Campbell, J., Land, C., and Paterson, M. 2006a. *Against Automobility: Social Scientific Analyses of a Global Phenomenon*. Hoboken: Wiley-Blackwell.
- Böhm, S., Jones, C., Land, C. and Paterson, M. 2006b. Conceptualizing Automobility: Part 1. Introduction: impossibilities of automobility. In Böhm, S., Campbell, J., Land, C., and Paterson, M. Eds. *Against Automobility: Social Scientific Analyses of a Global Phenomenon.* (pp. 2–16). Hoboken: Wiley-Blackwell.
- Collin-Lange, V. (Submitted). "My car is the best thing that has ever happened to me": Automobility and novice drivers in Iceland. Submitted to *Young: Nordic Journal of Youth Research*.
- Collin-Lange, V. (2012), Socialities in motion: Automobility & car cruising in Iceland. Published in *Mobilities*. DOI:10.1080/17450101.2012.743220. (Currently available only online).
- Collin-Lange, V., & Benediktsson, K. (2011). Entering the system of automobility: Car ownership and use by novice drivers in Iceland. *Journal of Transport Geography*, 19(4), 851-858.
- Creswell, T. (2006). On the move: Mobility in the western world. New York: Routledge.
- Dunn, J.A. J. (1999). The politics of automobility. The Brookings Review, 17(1), 40.
- Edensor, T. (2004). Automobilty and national identity. *Theory, Culture & Society,* 21(4/5), 101-120.
- Fotel, T., & Thomsen, T.U. (2004). The surveillance of children's mobility. *Surveillance and Society*, 1(4), 535-554.

- Hannam, K., Sheller, M., & Urry, J. (2006). Editorial: Mobilities, immobilities and moorings. *Mobilities, 1*(1), 1-22.
- Malbon, B. (1999). Clubbing Dancing, Ecstasy and Vitality. London: Routledge.
- Reynarsson, B. (1999). The planning of Reykjavík, Iceland: Three ideological waves a historical overview. *Planning Perspectives, 14*(1), 49-67.
- Sheller, M. (2004). Automotive emotions, feeling the car. *Theory, Culture & Society,* 21(4/5), 221-242.
- Sheller, M., & Urry, J. (2000). The city and the car. *International Journal of Urban and Regional research*, 24(4), page?.
- Sheller, M., & Urry, J. (2006). The new mobilities paradigm. *Environment and Planning A, 38*(2), 207-226.
- Skeggs, B. (2004). Class, self, culture. London: Routledge.
- Urry, J. (1999). *Automobility, car culture and weightless travel*. Online paper. Accessed on the 12<sup>th</sup> of May 2008. http://www.lancs.ac.uk/fass/sociology/papers/urry-automobility.pdf
- Urry, J. (2002). Mobility and proximity. Sociology, 36(2), 255-274.
- Urry, J. (2004). The "system" of automobility. Theory, Culture & Society, 21(4/5),25-39.
- Þórðarson, Ó. (2001). Ofvitinn. Reykjavik: Mál og Menning.

## **Appendix 2**

# Automobility and Environmental Concerns in Iceland

Virgile Collin-Lange<sup>1</sup>

&

Hanne Krage Carlsen<sup>2</sup>

#### **Abstract**

One of the biggest with automobility is the environmental costs of having a transport system based on private motoring. The environmental impacts of automobility is a matter of great concerns including in Iceland. In 2006, the country ranked as number two for the number of cars per 1000 inhabitants. On the 1st of January 2009, there were fewer than 240,000 cars registered for slightly over 319,000 inhabitants. A study made in 2003 on environmental issues in Iceland showed that Icelanders are overall quite concerned by environmental issues except to the ones related to cars. Yet, most of the air pollution in the Capital area is from cars. Recent studies have shown a serious increase in asthma medication directly related to increase in pollution levels. This article presents the results of an internet survey carried out in the first half of 2008 among drivers in Iceland. It explored attitudes to air pollution and other environmental concerns of Icelandic drivers and the willingness to change their behaviours in favour of more environmentally friendly ones.

## **Keywords**

Automobility, drivers, traffic pollution, environmental concern, Iceland.

This is a draft. Please do not quote.

<sup>&</sup>lt;sup>1</sup>PhD Student. Department of Geography and Tourism, University of Iceland vrc1@hi

<sup>&</sup>lt;sup>2</sup> PhD Student. Centre of Public Health sciences, University of Iceland / Department of Occupational and Environmental Health, Umeå University. hkc1@hi.is

#### Introduction

A common quip in Iceland says that Icelanders use their car as "sweaters" (Omarsson, 2008). On the 1<sup>st</sup> of January 2009, there were fewer than 240,000 cars registered for slightly over 319,000 inhabitants, about 0.8 car per inhabitant (Hagstofa Íslands, 2009a, 2009b). In 2006, Iceland ranked as number two for the number of cars per 1000 inhabitants (Collin-Lange, Manuscript submitted for publication; Dorling, 2006; Economist, 2009), a number which is very high compared to other neighbouring European countries (Economist, 2009).

In 2008, opinion columnist and politician (centre-left) Guðmundur Steingrímsson described in his weekly satirical newspaper columns the Icelandic attitude to environmental issues in the following way: "When we are asked to reduce emission of greenhouse gases, we tend to stick our noses in the air and say; but our pollution is different! This is Icelandic pollution! Good pollution." (Steingrimsson, 2008). Two recent serious cases of dioxin pollution in Iceland have exposed the passive attitudes of national and local authorities toward pollution (AFP, 2011; Morgunblaðið, 2011; Nikolov, 2011a, 2011b). This statement and these events contrast with a study made in 2003 on the environmental concerns in Iceland which showed that Icelanders are overall guite concerned by environmental issues and seem to exhibit responsible environmental behaviour (Árnason, 2004). Those results are striking compared to a 2007 Gallup poll about global environmental concern: Icelanders were by far the least concerned of 57 countries surveyed about climate change (59% disagreed with the statement: "Global warming is having a serious impact now in the area where I live"). In fact, Iceland was the only one of 57 countries surveyed where more people disagreed with the statement (Gallup, 2007).

As to the results of the Árnason study on transportation are quite interesting. On one hand, Árnasons results suggest that Icelanders believe that the environment is something to take care of, but on the other hand few of them are willing to change their transport behaviour. Only 15% report that they try to limit unnecessary driving, whereas 62% try to limit unnecessary use of electricity in their homes (Árnason, 2004). When participants were asked to state the importance of various environmental issues, decreasing car pollution came in fifth out of seven (the other options were; To stop the destruction of vegetation, decreasing greenhouse gas emissions, protect commercial fish stocks, increase the recycling of trash, grow forests, protect pristine nature, Árnason, 2004: 13). When participants were asked to list what the most important environmental issues were for the government (Árnason, 2004, 12) decreasing pollution from cars came in last.

Environmental issues linked to cars were not part of the public debate in Iceland until very recently. A few incidents occurred where little wind and drought caused a brown pollution cloud to appear over Reykjavík as well as recent research showing levels of particle pollution surpassing those of many European capitals (Carlsen, 2010; Jóhannson, 2007), opened the debate. More newspaper articles were dedicated to the subject, with increasing voices of concern, and reporting that the fraction of people limiting driving is increasing, and questioning the necessity of everyone owning a car. Several pressure groups such as cyclists or pro-bus riders, supported by a few local politicians also tried to get into the public debate, but only few mentioned the environmental cost of automobility in Iceland. The debate was mainly focused on the

inefficiency of the Icelandic car fleet, the liveability of city spaces mostly dedicated to cars, and the exercise benefits of not commuting by car.

The aim of this paper is to investigate the impacts of environmental concerns on modal choices, with a focus on car use. This paper presents the results of an internet survey carried out in the first half of 2008. It looked at the attitudes of drivers toward air pollution and explored the drivers' willingness to change their behaviour in favour of more environmentally friendly attitudes. The overall aim of the survey was to look at the impacts of environmental concerns on a person's automobility.

## **Automobility and Environmental Concerns**

Automobility has been defined as "a patterned system which is predicated in the most fundamental sense on a combination of notion of autonomy and mobility" (Böhm et. al, 2006, 4). Embodied by the car, it has been presented as "the single most important cause of environmental resource-use" and "accounts for one third of CO<sub>2</sub> emissions" (Kingsley & Urry, 2009; Sheller & Urry, 2000; Urry, 2004). A multitude of critiques recently have been formulated on automobility, especially in the current context of global warming (Kingsley & Urry, 2009). Scientific measurements corroborate those claims and public debates in many countries have been focused on carbon emissions of a car based transport system.

Defining environmental concerns is quite difficult as no consensus exists on the matter. Tákacs-Sánta distinguished two approaches in the literature on environmental concerns: policy and theory (Takács-Sánta, 2007). This paper is concerned with the theoretical and the approach to attitudes to environmental concerns. Environmental concernscan be defined by three aspects: intellectual, affective and reactive. These define the connection between knowledge of environmental issues, ways to deal with them and finally responsive attitudes to the issues. These three aspects are moulded by cultural and societal factors. The construction and strength of a person's environmental concern depends on the 's relationship between oneself and nature. In other words, the degree of environmental concerns depends on the strength of the human-nature relationship. This human-nature relationship is based on a person's values and attitudes toward nature. Both values and attitudes are important in the constitution of environmental concerns. Values are generally constant principle and ideas about something. An attitude describes the tendency to react to a certain stimulus. This reaction can be positive or negative. In addition, environmental concerns can be both individual and collective. The collectiveness of environmental concerns is very important when looking at governmentally, in terms of environmental policies and associated behaviours. It is articulated by a bottom-top relation, the bottom being the people expressing their expectations in terms of the environment and the top being governmental authorities and their response, or lack of response, to these expectations. Environmental concerns are important in the process of decision making. It can greatly influence modal choices as, for example, those linked to automobility. Today those issues are linked to the prominence of the car but we can imagine that the same kind of concerns were raised with any previous form of automobility as, for example, the use of horses and the appearance of pedestrian pavements.

## The survey

#### Methods and sampling

Data was obtained via an internet questionnaire March-April 2008. The questionnaire asked about demographic characteristics, employment, commuting habits, car ownership, and attitudes toward environmental issues related to car use.

The survey was posted to professional groups, student groups on the university campus, organizations, the car owner's association and Reykjavík city employees. The questionnaire took an average of 10 minutes to complete. A total of 908 answered the questionnaire, 51% men and 49% women. Some respondents only replied to parts of the questionnaire.

The results showed no noticeable difference between the genders with regard to commuting habits. This mirrors the broader context of gender equality in Iceland. Thus, unless specified, the results are presented together for both genders. The respondents were on average 42 years old (range 14-88) and the women were on average younger than the men, (39 and 44 years). A full 75% of the respondents stated that they worked, 19% were students and 6% worked from home or were retired. There were no geographical restrictions and the survey sampled the whole country, yet the location data showed that 82% of the respondents lived in the Capital area.

#### Driving licences and car ownership

First the respondents were asked if they had a driving licence (table 1).

Table 1: How many individual in your household have a driving licence?

	N	%
_	_	
0	5	0.6
1	145	16.2
2	495	55.3
3	164	18.3
4	6	7.5
5	17	1.9
> 5	2	0.2
Total	895	100

In more than half of all households, at least two residents had a driving licence while in little under one fifth of households there were three residents with driving licences. Households where no one had a driving licence were rare and only five people lived a household where no one had a driving licence.

Table 2: How many cars are in your household?

	N	%
0	34	3.8
1	368	41.6
2	342	38.6
3	97	11.0
4	33	3.7
5	11	1.2
Total	885	100

Four out of five households had one or two cars (Table 5). Car ownership appeared to be close to mandatory for the respondents, with only 3.8% reporting having no car in the household.

#### Commuting

Table 3: How do you commute to and from work/school?

	N	%
Have a car, drive myself	65	73.4
In a car, get a ride	38	4.2
Take the bus	49	5.5
Bike	71	7.9
Walk	80	8.9
Total	896	100

Most respondents commuted in a private car while few walked or biked, and very few used public transport or got a ride. According to a survey from the City of Reykjavík, 3% bike to work (Reykjavíkurborg, 2001).

Table 4: How far is your daily commute?

	N	%
less than 1 km	104	11.9
1 – 5 km	312	35.8
6 – 10 km	212	24.3
11 – 15 km	139	16.0
16 – 20 km	36	4.1
more than 20 km	68	78
Total	871	100

Most respondents commuted between 1 and 5 km to and from work or school, one fourth commuted 11 kilometres or more. The length and mode of commuting was almost identical between sexes, which is agrees with the fact that Icelandic women are very active on the labour market.

The mode of transport varied with the distance between home and work (figure 1). Most of the people using cars (driving themselves or getting a ride) commute between 6 and 10 km. One interesting thing appeared in the results. In average, cyclists and people walking live close to their work place.

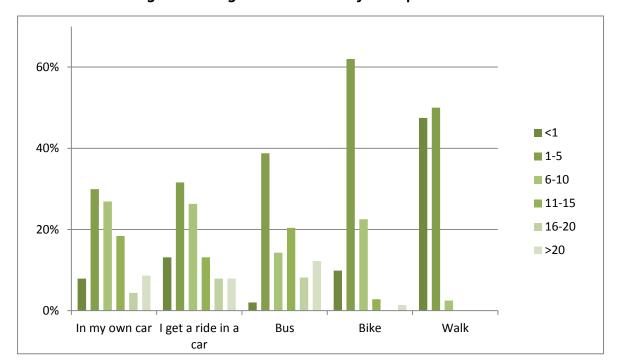


Figure 1: Length of commute by transport mode.

## **Environmental Concerns**

Car use

The results showed that three fifths consider that they are not using their cars too much. The respondents use their cars almost every day. Most of the respondents think that this is not an issue and the results show that they do not consider other modal options (table 5).

Table 5: Do you think you use your car too much?

	N	%
Yes	325	40.9
No	469	59.1
Total	794	100

#### Car pollution

Almost four fifths of the respondents declared that they reduced unnecessary driving. At first glance, the results look good; people seemed to be inclined to reduce unnecessary driving. These results contrast with the results from the Árnason study (2004). In his study, Árnason found that "unnecessary driving in a private car is the behaviour that few respondents have tried to make more environmental – only 15 % of respondents say that they "very much" or "quite much" try to reduce such driving" (Árnason, 2004, p. 15). Indeed, the augmentation of the price of petroleum products, during the first half 2008, affected mobility traits and motor vehicle use in Iceland. Nevertheless, the results showed that the respondents did not link unnecessary driving to pollution and their motives were economical and not environmental. Tables 6 and 7 give more information about the respondents and their attitude toward car pollution.

Table 6: Do you try to reduce unnecessary driving?

	N	%
Yes	581	73.4
No	200	25.2
Have no car	11	1.4
Total	792	100

Table 7: Do you think your car pollutes?

	Won	nen	М	en	Į.	All
	N	%	N	%	N	%
Yes No Don't	106 11	28.0 42.5	104 229	26.9 59.2	210 390	27.4 50.9
know	112	29.6	54	14.0	166	21.7
Total	379	100	387	100	766	100

These results were, for us, striking. Half of the respondents declared that their car did not pollute. More than one fourth thought that their car polluted and one fifth did not know if their car polluted the atmosphere. This question was one of the few that showed a gender difference. Indeed, there were more women that did not know if their car polluted. These results probably demonstrate misinformation or the lack of information concerning the effect of exhaust from cars. In order to know more about this subject, we asked the respondents whether they considered pollution as a factor when they bought their car (Table 8).

Table 8: Did you consider pollution when you bought the car?

	N	%
Yes	218	27.4
No	543	68.3
Don't know	34	4.3
Total	795	100

Two thirds of the respondents had not considered pollution when buying the car. This question was followed by an open-ended question asking people to elaborate on why they had or had not considered pollution. There were three categories of people who did not consider pollution when they bought their car.

The first category contains the people who reported that they had either not chosen the car themselves, had limited funds or bought the car from a relative or such, so they felt they could not consider environmental issues.

The second category was those who reported not thought about it, who tried to belittle the perceived impact of pollution from the car. Here are few quotes from their answers:

"To drive is so obvious today and you just don't think about it."

"Paid very little for it. I needed a car for my dog. The car is in good shape."

"Did not think much about it [pollution]. Cows pollute more than cars."

"Worrying about pollution had not come into fashion.

I just wanted a big car."

The third and last category includes those who blame the organisation of the infrastructure. Hence, because they did not have a choice whether to have a private car or not, they don't see why they should have considered environmental issues when buying their own private, claiming that:

"It is very difficult to live in Iceland today and not have a private car".

The people who gave environmental concern a thought (meaning that some were seriously considering the environmental effect of their driving) can also be divided into

three categories. First, people who really considered car pollution when they bought their car. Here are a few quotes from their answers.

"Live in street with heavy traffic and am very concerned about pollution."

"Because I do not want to promote further pollution, it is enough as it is."

"I live on earth, as many others."

The second group felt diesel fuel was more environmentally friendly, this was why they declared that they considered the environmental impact of their future car when they bought it:

"I think that diesel fuel pollutes differently and less than petrol."

"I bought a diesel car that consumes little and pollutes little."

Thirdly, there were those who did not think about the environment directly, instead petrol economy governed their choices of small, economical, hence more environmentally friendly cars:

"Looked mostly at fuel economy...fuel economy = less pollution."

Since one of the goals of this survey was to evaluate the environmental concerns of our respondents, and since this could not be done without a more global perspective, we asked them what they thought about greenhouse gases and global warming.

Table 9: Are you concerned about greenhouse gases?

	N	%
Much	171	20.7
Some	531	64.2
None	125	15.1
Total	827	100

Most people expressed some concern about global warming and greenhouse gasses, only few were not concerned at all.

These results contrast with the preceding ones (table 12), most of the respondents were concerned about greenhouse gases but did not consider pollution when they bought their own car. It shows that people were concerned on a global and general scale, but not on a local and everyday life scale when it comes to their daily life and more precisely their own modal choices; the respondents seemed to distance themselves from environmental concerns.

The next table looks into the concerns people have about air pollution in the city. For this question we used a scale, 0 being "not at all concerned" and 5 being "very concerned". Most people expressed medium concern over urban air pollution. Here again there were some gender differences. Women are more concerned about air pollution in the city than men, and only very few women said that they were not at all concerned.

Table 10: How concerned are you about air pollution in the city? (0=not concerned, 5=very concerned)

	Wo	men	M	len	Α	II
	N	%	N	%	N	%
0	11	2.7	67	16.3	78	9.5
1	43	10.5	100	24.3	143	17.4
2	99	24.2	71	17.2	170	20.7
3	116	28.4	67	16.3	183	22.3
4	86	21.0	68	16.5	154	18.8
5	54	13.2	38	9.2	92	11.2
Total	409	100	411	100	820	100

Exploring the matter further, we asked if people were noticing air pollution, on a scale from 0 to 5 where 0 was "not at all" and 5 "a great deal"

Table 11: Do you notice air pollution? (0=not at all, 5=very much)

N	%
114	14.9
207	27.1
170	22.2
161	21.0
67	8.8
46	6.0
765	100
	114 207 170 161 67 46

A minority of respondents noticed air pollution very much, while most people took little notice of air pollution. Almost 15% of the respondents claimed to not notice it at all.

During the analyses of the data, we decided to calculate these results in terms of area of residence. When plotted against residence area (figure 2), a clear pattern emerged,

even though the means of the groups were not significantly different. The farther from the city centre the respondents lived, the less they seemed to notice air pollution.

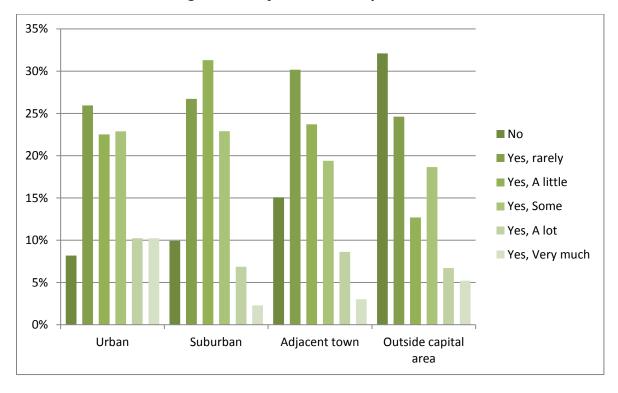


Figure 2: Do you notice air pollution?

Indicators of whether respondents noticed air pollution were also plotted against the age of the respondents and the mode of transportation but there was no significant trend in the results (results not shown). Our next step in the questionnaire was to explore the degree of information about air quality and pollution.

Information

Table 12: Do you know where you can get information about air pollution?

	N	%
V	250	24.4
Yes	258	31.4
No	512	62.6
Not interested	50	6.0
Total	820	100

Most of the people stated that they didn't know where to get information about air pollution. The air pollution levels information can be found on certain websites such as the national daily newspapers and the website of the city of Reykjavík. Yet the information is not clearly visible on these websites and users have to know where to

look in order to get it. This could explain the fact that more than 60% of the respondents did not know where to find the information. Only 50 out of the 820 people who answered this question were not interested in finding information.

Table 13: Do you think you need better information about air quality?

	Women		Men		Total	
	N	%	N	%	N	%
Yes	248	61.2	207	50.2	455	55.7
No	77	19.0	123	29.9	200	24.5
No opinion	80	19.2	82	19.9	162	19.8
Total	405	100	412	100	817	100

Nevertheless, the results presented in table 17 indicate that there is a desire to become more informed about air quality and pollution. More than half of the respondents thought that they needed more information on the subject. In this respect women were more demanding than men, several female participants explained in the free text that they demanded that kind of information because of their children, the location of their kindergarten or due to health issues such as asthma. Less than 20% did not have opinion on the question.

#### Suggestions

In order to have more precision about how the respondents would like to receive the information, we made a few suggestions and asked them to choose among them. They could choose several answers, so the total number of responses add up to more than 100%.

Table 14: How would you want to get information about air quality?

	N	%	
A	244	25.7	
Announcements on TV/Radio	311	35.7	
On the front page of web media	519	59.6	
In an SMS	30	3.4	
In an email	69	7.9	
In the weather report	548	62.9	
On a billboard by the road	267	30.7	
Other	44	5.1	
Total	908	100	

Most of the respondents wanted to see more information about air quality and pollution during the daily weather report on TV. This was also one of the most

consistent points of the free text replies; they would like to see that kind of information released during the daily weather forecast both at midday and in the evening. Much less popular were announcements on radio/TV (36%). The least popular was to get information by e-mail or SMS. One interesting result was that nearly 60% wanted to see the information on the front page of web media. The Information about air pollution levels in the capital area are readily available online, given that the information is already on the front of many websites, people seem to not be able to find it.

We then asked what the respondents thought authorities should do to reduce air pollution. We chose to ask this first in order to find out what the respondents were expecting from their local government in terms of reduction of pollution. We asked then, what the respondent would be ready to do personally to reduce their own car pollution. For both of those questions, multiple answers were possible, so total number of responses add up to more than 100% (n=908).

Table 15: What could authorities do to reduce pollution in the city?

	N	%
Encourage people to buy less polluting cars	564	62.1
Encourage people to buy alternatively fuelled vehicles	402	44.3
Encourage people to bike more	586	64.5
Encourage people to pool car	442	48.7
Make city buses free	639	70.4
Make the city bus system better	644	70.9
Build a light rail system in the city	299	32.9
Take up a congestion charge	92	10.1
Give tax discount to purchase of cars that pollute less	509	56.1
Limit number of cars in some neighbourhoods	108	11.9
Create system where cars only allowed to drive certain days of the week	34	3.7
Introduce car pool lanes	111	12.2
Total	908	100

Respondents were generally very positive towards generous initiatives from the authorities to reduce car pollution, such as improving the bus system and introducing free busses for all<sup>3</sup>. Both of these suggestions were chosen by slightly more than 70% of the respondent. More than half thought that authorities should encourage people to buy environmentally friendly cars. More than 60% thought that the authorities should entice people to bike more. Encouraging people to buy alternatively fuelled vehicles (44.3 %) was certainly less popular than encouraging people to buy environmentally

-

<sup>&</sup>lt;sup>3</sup> City buses were from September 2007 made free during the school year for students of intermediate schools and universities.

friendly cars. About a third (32.9%) were positive about a light rail system, which has been for a while. Least popular was to introduce car pool lanes (12.2%). The restrictive initiatives, such as restricting driving within certain neighbourhoods, had fewer supporters. The high approval for initiatives involving buses is slightly surprising since the bus system is very much criticized and very few people other than students and school children use them regularly. The lower approval rate for initiatives to make people buy alternatively fuelled vehicles indicates that people have low esteem for these cars and that, in the eyes of many, they are not yet a viable option. Respondents expect governments to do more; nevertheless, personally they seem to be reluctant to do more.

Table 16: What would you personally be ready to do to reduce pollution from cars?

	N	%
Take the bus	416	45.8
Bike	512	56.4
Walk	505	55.6
Carpool	350	38.5
Buy a smaller car	222	24.4
Buy an alternatively fuelled vehicle	355	39.1
Total	908	100

The responses from the personal perspective are presented in table 16. Respondents were asked what they would personally do to reduce pollution from cars. More than half said that they would bike more or would walk more. A bit more than 45% would take the bus. Less than 40% would buy an alternatively fuelled vehicle, or would share a car pool. Finally, it was striking to see that less than one fourth would buy a smaller car.

## The 'Icelandic Sun Syndrome'

Only few studies of public health indicatorshave been carried out, they found small associations between asthma drug and heart medicine usage which increased in the wake of high pollution levels (Carlsen et al. 2010 & Finnbjörnsdóttir 2010). Internationally, air pollution from traffic sources has been shown to be the cause of about 6% of all fatalities. A large European review study showed that air pollution is also responsible for a large amount of excess lung diseases, asthma, chronic obstructive pulmonary deceases, and bronchitis as well as lost intelligence points in children (Crouse, 2000; Künzli & al., 2000). Air pollution in Iceland is largely due to automobile traffic, but there are also natural factors that contribute to pollution including geological, erosional and meteorological factors that result in blowing sand and sometimes volcanic eruptions (Jóhannson, 2007). There is also a lack of vegetative cover to help anchor drift and wind erosion (due to climatic and historical reasons).

In Iceland, air pollution raises limited public concern. The inhabitants of Reykjavík do notice and have some concerns about air pollution in their city but few of them are willing to take action on this matter. This might be linked to the lack of information or

misinformation. Indeed, actions taken to educate and inform inhabitants are non-existent, and effective preventive measures missing. Yet, there is a warning procedure for the City of Reykjavík, limited to sending out a press release to the major media, kindergartens and schools, asking them to publish the information on their websites. This is only done when the concentration of airborne particulate matter can be predicted with some certainty to be over 100 microgram/m³ (twice the health limit) for 24 hours, in order to avoid unnecessary warnings.

Iceland is a nation of drivers and automobility is treasured. Our survey results show that about one out of four has considered environmental factors when purchasing their car, but that is bound to change rapidly regardless of environmental views due to the price of petrol. In spite of the fuel price surge in spring 2008, when the survey was carried out, Icelanders seemed to favour large powerful cars, as rather few chose the option of getting a smaller car, when asked what they would consider doing to reduce car pollution. The smaller car was the least popular choice of all in our survey. More striking, half of drivers reported not thinking that their car pollutes much, which is in stark contrast to a statement from Iceland Energy Agency director Sigurður Friðleifsson, who has publicly stated that the Icelandic car fleet is one of the most inefficient in the world (Morgunblaðið 2008).

In Iceland, there appears to be a lack of willingness, both on the part of the authorities and the people, to accept any collective responsibility for the environmental cost of car use (Maxwell, 2001). Yet again, this might be due to the lack of information or misinformation. In addition, it seems that on one hand, people wish the authorities to take measures and to be more active and on the other hand, authorities seem to hope that inhabitants will take personal action. In other words, both individuals and authorities delegate the responsibility for car use to others. The reasons behind these attitudes are quite unclear and more research should be carried out.

One of the first reasons that could be explored is the value that Icelanders put on automobility. Icelanders put extremely high values on autonomy, mobility and flexibility. In Iceland, automobility seems to be a normative action, for example Icelandic youngsters, respond to both mobile spatial and social expectations as soon as they can do get a driving license (Collin-Lange, 2012; Collin-Lange & Benediktsson, 2011). Perpetuating such an automobile system and maintaining such high values have a price. It has been demonstrated that for the perpetuation of the system of automobility, its users deny its costs (Böhm et al., 2006a). Investigating the real cost of automobility in Iceland could be dangerous, both in terms of economics and environments, and our findings suggest that Icelanders deny the cost of automobility. Hence when it comes to environmental issues linked to car use, only the minimum to prevent environmental impact seems to be achieved. One of other the explanations could be the relationship that most Icelanders have with nature. Iceland is a country where nature and the natural areas have great importance and are easily accessible. The inhabitants of Reykjavik just need to drive a few kilometres outside the city to access immense natural areas. When asked, most Icelanders consider themselves very close to nature and cherish their proximity to it. Pristine nature seems for them to be overabundant and unlimited. We do think that this relationship to the natural environment, and their declared proximity to it and its abundance, combined with strong national feelings, influence Icelanders' perspective on the environment, and in part negate the level of

environmental concerns they have, as large parts of the natural environment of Iceland appear untouched, unpolluted and largely available.

As we have mentioned in the introduction, columnist Guðmundur Steingrímsson conceptualized this situation in a newspaper column. In the column, he named this phenomenon *The Icelandic sun syndrome* in reference to the attitudes of Icelanders toward the sun and the fact that Icelanders do not use any sun protection when in Iceland. However, once abroad, Icelanders, cover themselves with all kinds of solar protection and do care about sun burn and skin ageing. Steingrímsson extended his concept to pollution:

"When we are asked to reduce emission of greenhouse gases, we tend to stick our noses in the air and say; but our pollution is different!

This is Icelandic pollution! Good pollution."

(Steingrímsson, 2008)

Our survey shows that they do care about the environment, but due to the lack of information, and the amount of misinformation in Iceland about what air pollution is, this does not translate into their daily commuting practices and few of them are willing to make a personal effort, in spite their self-declared environmental concern,. Informative procedures are limited and no real actions are taken to improve air quality. When actions do occur, they come in a media-political form and after the event; there is no continuity to perpetuate the actions. The results of our survey demonstrated that most people want more information about air pollution and wish that this matter would be taken more seriously. It also showed that awareness of the environmental cost of cars and air pollution can be developed by informing the population. Once informed, the public might be less reluctant to modify their mode of transport, both from within the system (e.g. buying an electric car) and outside the system by changing from one modal choice to another.

## **Acknowledgements**

The present work has been presented to the T2M Conference in Ottawa in 2008. A travel grant was given to one author. Both of the authors wish to thank the organisation committee for their financial support. The authors want to thank the participants for their time.

## References

- AFP (2011). Iceland says probing dioxin scare. *France 24*. [Accessed on 24<sup>th</sup> of April 2008] http://www.france24.com/en/20110209-iceland-says-probing-dioxin-scare?quicktabs\_1=0.
- Árnason, T. (2004). Umhverfisvitund Íslendinga [Environmental consciousness of Icelanders]. *Landabréfið*, *20*(1), 3–23.
- Böhm, S., Campbell, J., Land, C., and Paterson, M. 2006a. *Against Automobility: Social Scientific Analyses of a Global Phenomenon.* Hoboken: Wiley-Blackwell.

- Böhm, S., Jones, C., Land, C. and Paterson, M. 2006. Conceptualizing Automobility: Part 1. Introduction: impossibilities of automobility. In Böhm, S., Campbell, J., Land, C., and Paterson, M. Eds. *Against Automobility: Social Scientific Analyses of a Global Phenomenon.* (pp. 2–16). Hoboken: Wiley-Blackwell.Carlsen HK (2010). *Air pollution in Reykjavík and use of drugs for obstructive airway diseases.* University of Iceland, Reykjavík.
- Carlsen, H.K. (2010). Air pollution in Reykjavík and use of drugs for obstructive airway diseases. University of Iceland: Reykjavík.
- Carlsen H.K., Zoëga H, Valdimarsdóttir, U, Gíslason, T, Hrafnkelsson, B. (2012) Hydrogen sulfide and particle matter levels associated with increased dispensing of anti-asthma drugs in Iceland's Capital. *Environ Res.* 113: 33–9.
- Collin-Lange, V. (2012), Socialities in motion: Automobility & car cruising in Iceland. *Mobilities*. DOI:10.1080/17450101.2012.743220.
- Collin-Lange, V. (Submitted for publication). "My car is the best thing that has ever happened to me": Automobility and novice drivers in Iceland.
- Collin-Lange, V., & Benediktsson, K. (2011). Entering the system of automobility: Car ownership and use by novice drivers in Iceland. *Journal of Transport Geography*, 19(4), 851-858.
- Crouse, D. W. 2000. The real cost of the automobile: a report on recent research. Bulletin of Science, Technology & Society, 20(5): 366–378.
- Dorling, D. (2006). Worldmapper Dataset 031: Passenger Cars. from SASI, University of Sheffield, http://www.sheffield.ac.uk/sasi:
- Economist, 2009. Pocket World Figures 2010: Economist Book.
- Finnbjörnsdóttir, R. G. Zoëga, H. Olafsson, O. Rafnsson, V. Air pollution in Reykjavík and dispensation of drugs for angina pectoris. *Eur Respir J* (supplement) [Internet]. Vienna, Austria: European Respiratory Society; 2010. Available from: http://hdl.handle.net/1946/6358
- Hagstofa Íslands (2009a). Fólksbílar pr. 1000 íbúa / Inhabitants per passenger car. [Accessed on the 10<sup>th</sup> of January 2009]. Hagstofa Íslands: Reykjavik.
- Hagstofa Íslands (2009b). Mannfjöldi 1. janúar 2009 / Population 1st January 2008. [Accessed on the 10<sup>th</sup> of January 2009]. Hagstofa Íslands: Reykjavik.
- Hagstofa Íslands (2011). Skrásett ökutæki í árslok 1986-2009. [Accessed on the 24<sup>th</sup> of October 2011]. Hagstofa Íslands: Reykjavik
- Jóhannson, Þ. (2007). Svifryk í Reykjavík [Particle pollution in Reykjavík] M.Sc Thesis.
- Kaufmann, V., Bergman, M. M., and Joye, D. 2004. Motility: Mobility as capital. *International Journal of Urban and Regional Research*, 28(4): 745–756.

- Kingham, S., Pearce, J., Dorling, D., and Faulk, M. 2008. The impact of the graduated driver licence scheme on road traffic accident youth mortality in New Zealand. *Journal of Transport Geography*, 16(2): 134–141.
- Kingsley, D., & Urry, J. (2009). *After the car*. Cambridge (UK) and Malden (USA): Polity Press.
- Künzli, N., & al. (2000). Public-health impact of outdoor and traffic-related air pollution: A European assessment. *The Lancet, 356,* 795-801.
- Latimer, J., and Munro, R. 2006. Driving the Social. In Böhm, S., Campbell, J., Land, C., and Paterson, M. Eds. *Against Automobility: Social Scientific Analyses of a Global Phenomenon*. (pp. 32–52). Hoboken: Wiley-Blackwell.
- Maxwell, S. (2001). Negociation of car use in everyday life. in Miller, D. (Ed.), *Car Cultures*. Oxford: Berg Publishers.
- Mogensen, Á., Sigvaldason, S., Jónsson, R., and Baldursson, J. 2000. *Ungir ökumenn:* Yfirlit yfir ráðstafanir til að fækka slysum. [Young drivers: Overview of recommendations for reducing accidents]. Reykjavík: Rannsóknarnefnd Umferferðaslysa.
- Mohan, G., and Mohan, J. 2002. Placing social capital. *Progress in Human Geography*, 26(2), 191–210.
- Morgunblaðið (2011). Díoxín í kjöti og mjólk yfir mörkum [Dioxin in meat and dairy products above the limits]. *Morgunblaðið*. [Accessed on the 23<sup>rd</sup> of May 2011] http://www.mbl.is/frettir/innlent/2011/02/04/dioxin\_i\_kjoti\_og\_mjolk\_yfir\_morkum/.
- Müller, S., Tscharaktschiew, S., & Haase, K. (2008). Travel-to-school mode choice modelling and patterns of school choice in urban areas. *Journal of Transport Geography*, 16(5), 342-357.
- Nikolov, P. (2011a). High Dioxin Levels Reported in Westman Islands. *The Reykjavík Grapevine*. [Accessed on the 24<sup>th</sup> of May 2008] http://grapevine.is/News/ReadArticle/High-Dioxin-Levels-Reported-In-Westman-Islands.
- Nikolov, P. (2011b). Pollution in West Fjords Becoming Serious Problem. *The Reykjavík Grapevine*. [Accessed on the 24<sup>th</sup> of May 2008] http://grapevine.is/News/ReadArticle/Pollution-In-West-Fjords-Becoming-Serious-Problem.
- Ormarsson, O. P. (2008) Hin heilaga úlpa [The holy sweater]. *Morgunblaðið* [accessed on the 24<sup>th</sup> of April 2008]. http://www.mbl.is/greinasafn/grein/1206582/
- Reykjavíkurborg 1966. Aðalskipulag Reykjavíkur 1962-83 [General Plan of Reykjavík 1962-1983]. Reykjavík.
- Reykjavíkurborg Skipulags- og byggingarsvið 2001. *Aðalskipulag Reykjavíkur 2001-2024* [General Plan of Reykjavík 2001–2024]. Reykjavík.
- Reynarsson, B. 1999. The planning of Reykjavík, Iceland: three ideological waves, a historical overview. *Planning Perspectives*, 14(1): 49–67.

- Sack, R. D. 1986. *Human Territoriality: Its Theory and History.* Cambridge: Cambridge University Press.
- Sheller, M. 2004. Automotive emotions, feeling the car. *Theory, Culture & Society*, 21(4/5): 221–242.
- Sheller, M., and Urry, J. 2000. The city and the car. *International journal of urban and Regional research*, 24(4): 73–757.
- Sheller, M., Urry, J. 2003. Mobile transformation of "public" and "private" life. *Theory, Culture & Society*, 20(3), 107–125.
- Sheller, M., and Urry, J. 2006. The new mobilities paradigm. *Environement and Planning A*, 38(2): 207–226.
- Sigmundsdóttir, A. (2009). When Taking the Bus Is for Losers [Accessed on October 14, 2009] http://www.huffingtonpost.com/alda-sigmundsdottir/when-taking-the-bus-is-fo\_b\_320482.html
- Skipulags og byggingarsvið Reykjavíkurborgar, 2004 Landþörf samgangna: Úttekt og greining á landnotkun gatnakerfisins, helgunarsvæða þess og bílastæða í Reykjavík [The Demand of Land for Transportation Infrastructure: An Inventory and Analysis of Land Use for Roads, Road Corridors and Parking Space in Reykjavík]. Reykjavíkurborg.
- Steingrímsson, G. (2008). Íslenska sólin. *Fréttablaðið*. (In Icelandic)
- Takács-Sánta, A. (2007). Barriers to Environmental Concern. *Human Ecology Review*, 14(1), 26–37.
- Urry, J. 1999. Automobility, car culture and weightless travel. University of Lancaster. [Accessed on the 23<sup>rd</sup> of January 2009] http://www.lancs.ac.uk/fass/sociology/papers/urry-automobility.pdf
- Urry, J. 2000. Sociology Beyond Societies: Mobilities for the Twenty-First Century. London: Routledge.
- Urry, J. 2002a. Inhabiting the car. Department of Sociology, Lancaster University. [Accessed on the 26<sup>th</sup> of November 2008] http://www.lancs.ac.uk/fass/sociology/papers/urry-inhabiting-the-car.pdf
- Urry, J. 2002b. Mobility and proximity. Sociology, 36 (2): 255–274.
- Urry, J. 2002c. *Mobility, time and the good life*. Paper presented at the Ville en Movement Retrieved at http://www.ville-en-mouvement.com/telechargement/040602/paris.pdf
- Urry, J. 2004. The "System" of automobility. *Theory, Culture & Society*, 21(4/5): 25–39.
- Vegagerðin (2011). Samdráttur umferðar í ágúst: Umferðin minnkar áfram (*The reduction of traffic in August is still going on*) [Accessed on the 24<sup>th</sup> of September 2011]. http://www.vegagerdin.is/upplysingar-og-utgafa/frettir/nr/2738