

The Influence of Identity on Travel Behaviour

Jennifer Carole Brooks

Thesis submitted for the degree of PhD

Department of Town and Regional Planning
University of Sheffield

February 2011

Abstract

This thesis uses qualitative methodology to explore the role of identity shaping travel behaviour at an individual level, with a particular interest in the role of environmental values given their significance within environmental behaviour change policy. Awareness raising and 'smarter choices' are increasingly being considered as positive ways to reduce individual reliance on motorised transport through promoting value change and information about transport options. However, there is now widespread acknowledgement that environmental values are not a sufficient motive for pro-environmental behaviour – the so called 'value action gap'. Research around the value action gap has increasingly moved towards a marketing approach of segmenting the population into a series of groups with defined characteristics who are assumed to behave in similar ways.

This research applies a social psychological perspective based on Harré's (2001) 'standard model' of identity to answer the question: 'what is the role of identity in shaping travel behaviour?' The relationships between aspects of identity are explored through three themes drawn from the research: environmental values; the significance of place; and relationships with other people. In order to promote a participant-directed approach, photo elicitation methods were used with twelve participants, which then established the basis for subsequent in-depth interviews with each participant.

The research establishes that identity forms an overarching framework within which decisions around travel behaviour takes place. This framework of identity includes attitudes, values, experiences, skills, and relationships with other people. Pro-environmental travel behaviour can be encouraged by influencing the identity framework, for example by promoting the development of cycling skills in children, and giving young people a store of experiences of using public transport to draw from later in life.

Acknowledgements

I'd like to thank my succession of supervisors for their advice and much needed support during this PhD. Steve Connelly has shown commitment and enthusiasm for my research, and much patience throughout the whole process. Paula Meth has added insight and sense since her arrival. Libby Porter made a valuable contribution in the middle, and Tim Richardson started the whole thing off in the first place. Graeme Sherriff, Katie McClymont Sara Fuller and Kate Gridley read draft chapters – their comments were much appreciated.

Thanks also go to the twelve participants for cheerfully giving up their time to take photographs and talk to me.

I'd like to thank the lively and supportive community of research students for making things bearable and sometimes even fun. In particular, to Sara Fuller and Paul O'Hare for beer in the beginning, Dave Vanderhoven and Kirsten Owen for tea and cake at the end, and Matt Thompson for averting numerous technical disasters.

Thanks are also due to my marvellous office mates, particularly Ian Elsmore for his witty enthusiasm for things non-PhD, Deepak Gopinath for his wise words, and Katie McClymont for many distractions and much talk of knitting.

I'm also exceptionally grateful for my cheery virtual support teams, who have encouraged me to 'work at it slowly', and told me I'd always get there in the end.

And finally, to Peter, for holding my hand and believing I could do it, even when I didn't believe it myself.

Table of Contents

Abstract	2
Acknowledgements	3
Table of Contents	4
List of Figures	8
Chapter 1: Introduction	9
1.1 Rationale	9
1.2 Approach	10
1.3 Structure	10
Chapter 2: Transport policy and environmental behaviour	13
2.1 Introduction	13
2.2 Transport policy	13
2.2.1 Predict and provide	14
2.2.2 The new realism	16
2.2.3 Beyond the new realism?	18
2.2.4 Conclusions	20
2.3 Government attempts to change behaviour	20
2.3.1 Promoting pro-environmental behaviour	21
2.3.2 Changing travel behaviour	31
2.3.3 Conclusions	35
2.4 Market segmentation	35
2.4.1 Segmentation in travel behaviour research	35
2.4.2 Pro-environmental behaviour segments	37
2.4.3 Travel behaviour segments	40
2.5 Conclusions	45
Chapter 3: Individuals and identity	47
3.1 Introduction	47
3.2 Travel behaviour and everyday life	48
3.2.1 Time and space	48
3.2.2 Telecommunications and travel	53
3.2.3 The changing nature of places	58

3.2.4 Contradictions	61
3.2.5 Conclusions	63
3.3 Identity	63
3.3.1 Ontology	64
3.3.2 The development of a specific theoretical approach	67
3.4 Conclusions	75
Chapter 4: Methodology	77
4.1 Introduction	77
4.2 The pilot study	77
4.2.1 Framework	77
4.2.2 The use of travel diaries in the pilot study	79
4.2.3 The use of self directed photography in the pilot study	84
4.2.4 The pilot interviews	86
4.2.5 Conclusions of the pilot study	88
4.3 The development of the conceptual framework	88
4.4 The research process	93
4.4.1 Selecting and recruiting the participants	93
4.4.2 The use of self directed photography	94
4.4.3 The interviews	104
4.4.4 Analysis	107
4.4.5 Ethical considerations	108
4.5 Conclusions	109
Chapter 5: Introducing people	110
5.1 Introduction	110
5.2 Vignettes	111
5.3 Attitudes to transport	123
5.3.1 Public transport	123
5.3.2 Active transport	131
5.3.3 Private transport	135
5.3.4 Aeroplanes	138
5.4 Conclusions	138
Chapter 6: Environmental values	140

6.1 Introduction	140
6.2 Environmental values as part of identity	141
6.3 Value orientations	145
6.3.1 Biospheric value orientation, or feeling part of nature	149
6.3.2 Social altruistic value orientation, or looking out for other generations	151
6.3.3 Egoistic value orientation, or looking out for oneself	151
6.3.4 An ethic of common sense or frugality?	152
6.4 How environmental values shape travel behaviour	154
6.4.1 When values influence action	154
6.4.2 When values do not influence action	157
6.4.3 Actions without values	159
6.5 Conclusions	161
Chapter 7: Place	163
7.1 Introduction	163
7.2 Physical reality and the relationship with place	164
7.2.1 Physical traits	164
7.2.2 Infrastructure and traffic as barriers	168
7.2.3 Places meeting needs	171
7.2.4 Summary	174
7.3 Interaction with place	175
7.3.1 Feelings about places	176
7.3.2 Emotional attachment to place	181
7.4 Conclusions	186
Chapter 8: People	187
8.1 Introduction	187
8.2 Obligations to others and constraints on travel behaviour	187
8.2.1 Travelling with children	188
8.2.2 Visiting family	194
8.3 Influence of family and gaining independence	197
8.4 Positioning and travel behaviour	201
8.5 Conclusions	205

Chapter 9: Conclusions	206
9.1 Introduction	206
9.2 The role of identity in shaping travel behaviour	207
9.2.1 Self 1: physical embodiment	208
9.2.2 Self 2: the internal self	208
9.2.3 Self 3: the external self	210
9.2.4 Summary	212
9.3 Themes emerging from the research	213
9.3.1 Environmental values	214
9.3.2 The significance of place	216
9.3.3 Relationships and other people	218
9.3.4 Changes over time	220
9.4 Reflections on the conceptual framework	220
9.5 Wider implications of the research	223
9.6 Concluding remarks	226
References	227
Appendices	239
Appendix 1: Table of participants' characteristics	239
Appendix 2: Participant information sheet	241
Appendix 3: Mind map of analysis codes	243
Appendix 4: Table of participants' travel behaviour	244

List of figures

Figure 4.1	A conceptual model of multiple identity dimensions	79
Figure 4.2	Louise's photo of what used to be a row of local shops	98
Figure 4.3	Andrew's photograph of a fast road	99
Figure 4.4	Lindsay's husband's photo of litter on a train seat	102
Figure 5.1	Emma's comfortable footwear	111
Figure 5.2	The accessible bridge on Paul's journey to town	118
Figure 5.3	Donald at a cycling exhibition	119
Figure 5.4	Jim's narrowboat on the canal	121
Figure 5.5	Jim's view from the bus window	125
Figure 6.1	Jim's view from the viaduct	142
Figure 7.1	Donald's photo of barriers along a cycle path	168
Figure 7.2	Louise's local shops	172
Figure 7.3	Louise's newly regenerated town centre	179
Figure 7.4	Near Louise's house	182
Figure 7.5	The steps to the canal where Jim's boat is moored	185

1. Introduction

1.1 Rationale

Awareness of the environmental problems caused by road traffic is increasing. The DfT (2009a, p2) found that 'the vast majority of adults believed that the world and UK climate was being affected', with 'around 70% spontaneously selecting emissions from road transport as a cause of climate change' (ibid). As of September 2008, 192 developed and industrialised countries had ratified the Kyoto Protocol to achieve emission reduction targets (Friends of the Earth, 2008).

Travel behaviour poses significant environmental problems, and is also intricately bound with the actions of everyday lives: visiting friends and relatives, buying food, working life and leisure activities. There are conflicts at a global level between increasing mobility for all and the environmental consequences of this, and at an individual level, between environmental values and the 'coercion' of the flexibility and convenience of the car (Urry, 2005).

In the UK, Government attempts to change travel behaviour have centred on often unpopular fiscal measures such as congestion charging and toll roads, as well as persuasive 'soft' measures including information campaigns such as *Are you doing your bit?* (Department for Environment, Food and Rural Affairs (DEFRA), 2003). Underpinning such campaigns is an assumption that developing individual environmental values will lead to an increase in pro-environmental behaviour. However, research into pro-environmental behaviour suggests the existence of a gap between values and behaviour, indicating that behaviour cannot be changed by the manipulation of values alone (Demos/ Green Alliance, 2003; Barr, 2004). Such research also acknowledges the problematic nature of assuming that individuals will respond in a similar way to policy interventions – in this case by being concerned when informed of the relationship between driving and environmental problems, and therefore acting in a more environmentally friendly way out of a sense of altruism (Kaplan, 2000).

More recent research into travel behaviour has attempted some differentiation by segmenting the population into a series of groups according to their existing travel behaviour, environmental values, or the

extent to which they could be easily persuaded to change their travel behaviour (Anable, 2005). This research marks a positive step towards recognition of individual differences in motivation and behaviour around mobility, and is an incursion of the notion of identity into travel behaviour research. However, categories are static, and travel behaviour is detached from individuals' wider activities and surrounding environments.

1.2 Approach

The aim of this research is to explore how identity shapes travel behaviour at an individual level, with particular interest in the role of environmental values given their significance within environmental behaviour change policy. In order to do this, the thesis adopts a realist position of identity based around Harré's 'standard model' (Harré, 2001) of an enduring person with an enduring identity made up of a series of selves, which change throughout life and situations. This allows individual identity to be explored in detail, within the context of the material and social world that people inhabit.

The enduring, yet ever evolving, framework of identity necessitates a qualitative approach to the research itself. This research uses photo elicitation and in depth interviews to allow participants to tell the story of their travel behaviour. The result is a detailed account of the complexities and negotiations inherent in travel behaviour as it is enacted within the context of material circumstances, social relationships, and identity.

1.3 Structure

Chapters Two and Three set the context for the research. Chapter Two brings together debates around transport policy, and environmental behaviour to establish that travel behaviour has a significant impact on the environment, intentional or otherwise. It examines attempts to change travel behaviour and environmental behaviour more generally through national policy measures, and discusses more recent approaches using market segmentation.

Chapter Three begins by exploring travel behaviour and everyday life, including the influence of telecommunications on travel, and the changing nature of places. It moves on to discuss identities theories, developing a

conceptual framework for the research based on a social psychological perspective.

Chapter Four outlines the research process. Beginning with an account of an initial pilot study, it explains the philosophy behind researching twelve people in-depth and using self-directed photography. This chapter also contains reflections on the research process and outcomes of the research.

Chapter Five introduces the people involved in the research through a series of vignettes. These are edited pen portraits of each person, using phrases and situations drawn from the interviews to create a concise image of their environmental values, travel behaviour, and identity. The rest of the chapter outlines attitudes to each different mode of transport spread across the range of interviewees to give an indication of the breadth of opinions. This builds on the vignettes to provide a rounded picture of each person, and of the group as a whole.

Chapters Six, Seven and Eight explore the empirical material in detail through the emerging themes of environmental values, place and people. Chapter Six explores the values people hold in relation to the environment and how they are underpinned by different value orientations. Environmental values were once seen as the key to changing environmental behaviour, but recent research has consistently shown a gap between values and action. Chapter Six explores the way that environmental values influence travel behaviour.

Chapter Seven explores physical reality and how relationships with place shape travel behaviour. The role of places in meeting needs is discussed, as well as the way that emotional interactions with places can shape travel behaviour.

Chapter Eight considers individuals' relationships with other people, and how these relationships place obligations and constraints on travel behaviour, as well as shaping aspects of identity that significantly influence travel behaviour in later life.

Chapter Nine concludes the thesis by establishing how identity forms an overarching framework within which decisions around travel behaviour are made over time. Theoretical developments are discussed, as well as themes emerging from the research, and the usefulness of the conceptual framework of identity for research into travel behaviour. The thesis ends

with a discussion of the wider implications of the research, and some recommendations for policy and future research.

Chapter 2: Transport policy and environmental behaviour

2.1 Introduction

Chapter One established the need for action to mitigate the negative environmental and social effects of excessive use of private transport. Chapter Two traces the ways in which this need for action has been recognised and addressed in UK transport policy. It also examines the degree to which it is considered to be the responsibility of individuals to change their behaviour, and the extent to which constraints on individuals' behaviour are acknowledged and addressed.

Shifts in UK transport policy since the 1950s are outlined, from an ethos of predicting traffic growth and providing infrastructure to meet this demand, through to the present situation of an ethic of management of the demand for private transport. The role of environmental issues and concerns in shaping transport policy is also discussed. Following this, government attempts to promote pro-environmental behaviour in general, and travel behaviour in particular, will be explored, and situated in the context of debates around the degree of agency individuals have to change their behaviour, and the material, economic and cultural constraints which restrict and influence their behaviour. More recent policy which takes a market segmentation approach will also be explored for the contribution it makes to acknowledging that individuals react differently to behaviour change interventions.

2.2 Transport policy

Much of the history of transport policy has been characterised by a demand led, 'predict and provide' approach (Goodwin, 1999). However, during the years leading up to the late 1980s, there was a dawning realisation of the negative social and environmental effects of increasing levels of traffic growth, and the untenable nature of the 'predict and provide' approach. The emphasis of transport policy shifted from providing for demand, to attempting to manage it. This has significant implications for the way policy affects individuals. The focus shifts from government-provided infrastructure projects towards the behaviour of individuals, and attempts to modify that behaviour. This section traces that shift.

2.2.1 Predict and provide

The main characteristic of the 'predict and provide' approach is that 'demands are projected, equated with need and met by infrastructure provision' (Owens, 1995, p44). Transport planning in the 1960s was characterised by this demand-led approach, using forecasts and models to predict future trends (Banister, 1994, p21). Whilst this approach was to continue unabated for the next two decades at least, some suggestion of the unrest and discomfort to follow was introduced with the Buchanan Report (Ministry of Transport, 1963), which acknowledged the problems of traffic in urban areas, and suggested that the efficiency of the door-to-door service that the car was valued for was being compromised, first by the sheer number of cars in towns, and secondly by the designs of the towns themselves.

Whilst there is an inherent ambivalence in the Buchanan Report (Goodwin, 1999, p65) – simultaneously suggesting a need to limit the number of cars in towns, and advocating a complete restructuring of urban areas to accommodate the forecast growth in traffic – this report, along with the Smeed Report (1964) published a year later, marked the beginning of a shift in thinking around transport policy. Both reports recognised that an increase in road capacity creates problems, and acknowledged the general problems associated with traffic (Banister, 1994, p21).

This shift continued throughout the 1960s and 70s, with the publication of the 1968 Transport Act, concerned with, 'the allocation of resources and the best use of existing infrastructure' (Banister, 1994, p28). Transport planning was no longer seen as merely a technical exercise – social and environmental considerations were being taken into account, and concerns were being voiced over the assumptions made within the planning process (ibid. p30). Additionally, the rise in the environmental movement encouraged the public and pressure groups to become more involved in the planning process, and there was an increasing awareness of the importance of linking transport planning and land use (ibid. p35). However, with the publication of the 1987 White Paper *Policy for Roads in England*, the environment was still seen as a local amenity issue for national government, concerned with levels of noise pollution and the visual screening of roads with trees (Vigar, 2002, p68). This was about to change.

The publication of the 1989 Traffic Forecasts by the Department for Transport contributed greatly to the shift in transport policy thinking towards a consideration of the environmental and social effects of transport (Goodwin, 1999). The forecasts predicted that car traffic would increase by between 82% and 134% between 1988 and 2025 (ibid. p658). This level of traffic growth was unprecedented, and concern was raised about providing the level of infrastructure to cope with this forecast demand. Goodwin (1999, p658) identified this as, 'the high point of the "predict and provide" approach, and its final hour'. The publication of the traffic forecasts was closely followed by the Conservative government's *Roads to Prosperity* White Paper (1989), which outlined 500 road schemes, in keeping with the spirit of the 'predict and provide' approach.

The publication of the *Roads to Prosperity* White Paper in 1989 with its ambitious road building targets was met with significant environmental opposition (DfT, 2007, paragraph 1.8). Large numbers of local groups formed in opposition to specific road building proposals, and these were linked through the London-based group Alarm UK (Doherty, 1998, p371). In 1992, with the start of construction of the M3 through Twyford Down Area of Outstanding Natural Beauty, local groups opposing specific road building schemes became strongly linked with new 'eco-protest groups' (ibid). Local issues, such as pollution and habitat destruction became linked with wider issues of biodiversity loss and climate change.

The environmental discourses of the anti-roads protests were mirrored by official publications such as the Standing Advisory Committee for Trunk Road Assessment (SACTRA) report of 1994, which 'supported the claims made by anti-roads groups that new roads often generate more traffic' (Doherty, 1998, p374). The Earth Summit in 1992 had recognised the risk of transport-generated carbon dioxide emissions, and scientists had long warned of the potential impact of human activities on climate change (DfT, 2007, paragraph 1.8).

At the end of the 1980s, and beginning of the 1990s, there was, 'a universal recognition that there was no realistic possibility of increasing road supply at a level which approached the forecast increases in traffic' (Goodwin, 1999, p658). The 'storyline of freedom of choice' (Vigar, 2002, p79) therefore had to be re-examined, and an increasing focus on demand management was necessary to narrow the gap between demand and

supply of roads. While it is arguable that, ‘the principal challenge to the “predict and provide” paradigm was its own internal inconsistency rather than social and environmental issues’ (Vigar, 2002, p70), these social and environmental issues gained increasing prominence within the transport debate at the time, and greatly influenced later policy. The 1989 Conference of the Ministers of Transportation of 19 European countries illustrated the shift, with the acknowledgement of the significance of environmental concerns to transport, and the discussion of the possibility of reviewing taxes to further internalise the external costs of motoring (Goodwin, 1999, p661).

2.2.2 The new realism

This shift from a demand-led approach to transport policy to a recognition of the need for demand management was conceptualised by Goodwin et al (1991) as the ‘new realism,’ and has dominated much of the rhetoric of transport policy in the subsequent years. This new realism has five key principles (Goodwin et al, 1991, p111):

- to look at the problems caused by transport as a whole, rather than as separate parts;
- to give consistency of treatment between modes;
- the acceptance of the impossibility of catering for all projected desires of traffic movement;
- that there must be a distinction between essential and non-essential traffic;
- acknowledgement that human factors and travellers’ motivations have an impact on individual travel decisions – that policy-makers cannot simply impose technical solutions to problems.

This final point has led to much psychological research exploring the nature of the relationship between environmental and other attitudes and transport behaviour, and which sets the context for the exploration of travel behaviour in this thesis.

Whilst the emergence of the new realism marks a major paradigm shift in transport policy thinking, it should nonetheless be noted that the need for a demand management oriented approach was not quick to become part of government policy making. Whilst Goodwin et al (1991) place the emphasis

on the 1989 Traffic Forecasts as the watershed for a paradigm shift, for Vigar (2000) these were not enough to influence policy to any noticeable degree. He argues that the government's 1994 SACTRA Report, which officially introduced the concept of 'road-induced traffic', provided a further distancing from the predict and provide approach, and was more significant in coming from an 'insider group' (Vigar, 2000, p22). Bulkeley and Rayner (2003, p36) suggest that the identification of the new realism by Goodwin et al in 1991 was only in part an observation of an emerging consensus among policy makers and transport academics – it was also in some part an effort by, 'prominent policy entrepreneurs' to 'promote their own favoured response to a looming "transport crisis" of growing congestion and pollution.' If this is the case, it is perhaps not surprising that Vigar (2000, p21, and 2002, p76) does not see any evidence for demand management being the dominant principle in transport policy making until the mid 1990s. While there is some debate over the date of the introduction of the demand management approach into government transport policy making, there is very little doubt that it was adopted, in rhetoric at least, within the publication of the 1998 White Paper, *A New Deal for Transport* (DETR, 1998). 'Softer' measures, including school and workplace travel plans were adopted as a previously unconsidered policy option for reducing car use after 'harder' options such as motorway tolling and retail parking charges were dropped from the 1998 transport White Paper following lobbying from the media and powerful commercial interest groups:

'in the absence of powerful 'sticks' to force motorists out of their cars, emphasis was placed on 'carrots' designed to entice them out'
(Shaw and Docherty, 2008, p10).

The White Paper provides an outline for an integrated transport strategy focused around the principles of sustainable development. Goodwin (1999, p663) argues that the White Paper, 'starts from a formal and explicit rejection of the idea of providing for and accelerating current trends' – it is an abandonment of predict and provide, and is identified by Walton and Shaw (2003, p1) as a move towards the principles of the new realism. However, Banister et al (2000, p7) argue the White Paper was a 'weak and ineffectual' response to the transport debate, with little sense of delivery. While it is arguable that the White Paper embodies the principles of the

strong version of the new realism, these principles have been very difficult to put into practice.

2.2.3 Beyond the new realism?

Whilst the 1998 White Paper and the Transport Act 2000 which embodies the principles of the White Paper are focused around the notion of a sustainable transport policy, there was perhaps a shift in emphasis with the publication of *Transport 2010: The 10-Year Plan* (Department of Transport, 2000) which sets out the government's investment strategy to achieve the aims of the Transport Act. The Plan allocated £59 billion – a third of the money available – for investment in the roads network, and highlights the widening of motorways and trunk roads, the building of bypasses, and major schemes to, 'improve traffic flow' as some of the projected outcomes of the investment (Department of Transport, 2000, p3).

The 10-year plan marks, 'a move away from the demand management emphasis of the 1998 White Paper' (Vigar, 2002, p82). Shaw and Walton (2001, p1049) outline how the projected road building programme provided for within the 10-year plan would have, if realised, more than equalled the amount of extra road space provided by the Conservative government in the immediate aftermath of the publication of *Roads to Prosperity* – the highlight of the predict and provide era. This marks a dramatic shift in emphasis from the rhetoric of the 1998 White Paper. Shaw and Walton (2001, p1052) attempt to locate the new emphasis of the 10-year plan within the opposing discourses of predict and provide and the new realism, and conclude:

'[i]f the 10-year plan allocates too much public transport investment to be aligned with predict and provide, but takes insufficient account of the need for demand management measures to satisfy the requirements of new realism, then we suggest that the government's plans steer a middle course in transport policy and might represent a distinct new paradigm which we have tentatively labelled pragmatic multimodalism'.

'Multimodalism' refers to the consideration of a variety of transport modes to combat the problems posed by traffic congestion, and Shaw and Walton (2001, p1052) use 'pragmatic' to indicate the government's forced retreat from the 'idealist' position underpinning the 1998 White Paper, 'in the light of the remorseless growth in traffic volumes'. Vigar (2002, p81) suggests that this retreat was caused to a large extent by the public perception of the

government as 'anti-car', which, coupled with the continued problems of the public transport industry, led to a lack of confidence in the transport policies outlined in the 1998 White Paper, and, 'made the government's attempts to curb car use look unrealistic for most people'.

The 2004 White Paper, *The Future of Transport*, perhaps embodies more of the spirit of the 10-year plan (DfT, 2000) than the 1998 White Paper, and appears to present a somewhat confused message about the requirements for future transport. The 2004 White Paper states clearly that,

'we must manage the growing demand for transport. While additional infrastructure will be necessary, simply providing ever more capacity on our roads and railways, ports and airports, is not the answer in the long term.'

Management of demand for travel is mentioned, but it is also accepted that, 'our transport strategy has to recognise that demand for travel will increase in the future' (DfT, 2004). Capacity will be added to the road network, although where this is done, 'we will take steps to ensure that the benefits are locked in, and that the design is sympathetic to the environment' (ibid).

More recently, Shaw and Docherty (2008, p22) suggest a final shift away from the 'pragmatic multimodalism' of Shaw and Walton (2001, p1052) towards 'progressive realism' - 'inherently positive in outlook and fully cognisant of the economic, environmental and social dimensions of sustainability' (Shaw and Docherty, 2008, p22). This reflects their view, and seemingly that of the 2004 White Paper, that there is not 'a necessary contradiction between calls for new road building on the one hand, and for demand restraint on the other', and that travellers have both rights and responsibilities, and both of these should be reflected in transport policy:

'we should not travel – other than by walking and cycling – when we do not need to, but when we do, and we pay the true external costs for the privilege, the experience should be first class.'

These shifts in the emphasis of transport policy reflect to some degree public concern about and interest in environmental issues. Global environmental concerns such as climate change in relation to transport were becoming part of the wider public awareness throughout the 1990s. More local environmental issues, such as car fumes and noise pollution remain of significant public concern, particularly to people living near to busy roads (Burningham and Thrush, 2001, p22), and significantly, evidence shows that 'negative traffic impacts are concentrated in more

deprived areas' (Friends of the Earth, 2001, p13). Thus, wider environmental concerns in relation to transport remain intertwined with more localised issues around the dangers and inconveniences of traffic.

The 2005 UK sustainable development strategy *Securing the Future* (HM Government, 2005, p84) stresses the importance of addressing transport issues for sustainable development:

'the transport sector – excluding external aviation – is currently responsible for about one quarter of total UK carbon dioxide emissions. Eight per cent of this is contributed by road users.'

2.2.4 Conclusions

Despite the recognition of the importance of environmental issues in relation to transport policy, the environmental impact of transport has continued to rise, suggesting that demand for private transport has not been curtailed in any significant way. Evidence strongly suggests that public concern about environmental issues remains high, and yet this does not appear to have contributed to behaviour change. Therefore, government has had to address behaviour change as a policy issue.

2.3 Government attempts to change behaviour

Since the early 1990s, there has been a shifting emphasis in policy towards personal responsibility (Halpern et al, 2004, p3). This has been reflected in attempts to reduce the environmental impact of transport, which have focused largely around encouraging individuals to change their behaviour and shift to more environmentally friendly transport modes. Such campaigns have centred on increasing the availability of information about the environmental impacts of certain behaviours, and giving information about alternative behaviours with less of an environmental impact. There has, however, been little recognition of the structural constraints, both material and social, that restrict individuals' lives and choices, with the assumption generally being that people are free to choose their behaviour, and will make a rational choice once they know of the environmental impacts. Debates around the extent to which this is indeed the case can expose some of the assumptions underpinning government attempts to change behaviour, and perhaps reveal explanations for their general lack of effectiveness.

2.3.1 Promoting pro-environmental behaviour

Government responsibility for the environment has shifted between departments, presently lying with the Department for Environment, Food and Rural Affairs (DEFRA), formed in 2001 when part of the now disbanded Department of Environment, Transport and the Regions merged with the Ministry of Agriculture, Fisheries and Food in 2001 (DEFRA, 2010).

Similarly, responsibility for transport has shifted repeatedly in recent years, with the Departments of Transport (DoT) merging with the Department of Environment (DoE) in 1997 to form the Department of Environment, Transport and the Regions (DETR), which then changed in 2001 to the Department for Transport, Local Government and the Regions (DTLR), with responsibility for the environment passing at that point to the newly formed DEFRA (The National Digital Archive of Datasets, 2007). The dedicated Department for Transport (DfT) was created in 2002, with sole responsibility for transport affairs. Thus, at present, the related issues of transport and the environment are split between government departments.

There are several terms used to refer to behaviour which has an impact on the environment, all with slightly different connotations. The term 'environmental behaviour' is usually understood as being behaviour which is undertaken with the intention of having a positive, or at least not negative, impact on the environment, such as recycling. Increasingly, the term 'pro-environmental behaviour' is being used to refer to behaviour which specifically has a positive impact on the environment. DEFRA's (2008) *Framework for pro-environmental behaviour* aims to 'improve the environment through individual and community action', and contains some recognition of the complexity of behaviour which affects the environment. It is ambitious in scope, covering six main 'consumption clusters' – food, travel, tourism, and energy, waste and water in the home. The focus is on behaviour that will have a positive impact on climate change, and twelve headline behaviour goals are developed, spread over the six consumption clusters. The personal travel goals are: use more efficient vehicles; use the car less for short trips; and avoid unnecessary flights.

However, as environmental considerations are often not the primary motivator in decisions around travel, for example, Stern (2000, p407) suggests the use of the term 'environmentally *significant* behaviour' is more appropriate, as this emphasises the distinction between the *intention* of the

behaviour and the *impact*. This allows analytically, for example, for the possibility of behaviour which has a positive environmental impact, but which is not undertaken for this reason – such as the use of public transport for financial reasons. Where a particular kind of behaviour is being encouraged, this is often referred to as ‘pro-environmental behaviour’.

The drive to encourage pro-environmental behaviour through policy was born with the publication of the first UK Sustainable Development Strategy in 1994 (Lucas et al, 2008). From then until fairly recently, attempts to change behaviour have centred around three distinct approaches:

- the provision of environmental information
- incremental introduction of environmental regulations
- use of environmental taxes and charges.

Information provision models generally rely on giving information about the environmental impacts of behaviour to individuals with the intention that this will cause them to alter their behaviour. This is generally accompanied by practical information about more environmentally friendly alternative behaviours. Environmental regulations are largely applied to industry, and apply limits to the amount of pollution that can be generated, for example. Environmental taxes and charges can be applied to either industry or individuals, in the form of congestion charges for example.

There have been a number of weaknesses identified with each of these approaches. The provision of environmental information is inexpensive, but is deemed to have a negligible effect on individual behaviour (Demos/Green Alliance, 2003, p47), particularly when used alone. The UK government has mostly encouraged voluntary agreements, with compulsory regulations being rare. Environmental levies and charges have a potentially negative impact on lower income groups, and are perceived to be top down and mechanistic in nature (Lucas et al, 2008, p456).

From around 1990, the government was starting campaigns to promote pro-environmental behaviour changes in several areas. *Helping the Earth Begins at Home* was a Department of the Environment initiative that began in 1991 with a focus on reducing energy consumption in the home. It drew on dominant scientific discourses, and emphasised the links between ‘domestic consumption, atmospheric pollution and the fears of global

catastrophe' (Hinchliffe, 1996, p56). It was followed by *The Going for Green Initiative*, launched in 1995, which aimed to 'increase people's awareness of the part their personal choices can play in delivering sustainable development and to secure their cooperation and commitment to changing their lifestyles so as to reduce their impact on the environment' (Department of the Environment (DoE), (2005).

These early campaigns were followed by *Are you doing your bit?* which ran from March 1998 to October 2000, and was designed to educate and inform people about the environmental consequences of everyday actions (Demos/ Green Alliance, 2003, p30). It was intended to promote personal responsibility and increase pro-environmental behaviours at an individual level through promoting 'no cost measures' linking climate change and personal actions, the 'micro' (individual behaviour) with the 'macro' (global consequences) (DEFRA, 2003, p4). The main aims of the campaign were:

- to promote awareness of individual actions that can protect the environment
- to reinforce the link between individual action and climate change
- to make the environment mainstream.

DETR recognised from previous research that 'the public are genuinely concerned about the environment, [but] not everyone is ready to act,' particularly if an action is difficult or inconvenient (DEFRA), (2003), p4). *Are you doing your bit?* was based on the challenge of 'how to make people care' (p4). The idea was that, if people could be persuaded to care about, or value, the environment, then pro-environmental actions would follow. DETR did recognise that, as previous research had shown, making people care would not necessarily lead to pro-environmental action. Therefore, actions must be promoted as easily achievable and having a positive personal benefit.

The *Are you doing your bit?* campaign was aimed at everyone, with particular focus on the 89% of the population classed as 'concerned', especially the 51% 'persuadable', and with emphasis on strategies that would appeal to women, as they were considered more 'sympathetic' to environmental concerns, as well as often being 'the main instigators of change in the home.' This shows a relatively early attempt to separate the population into distinguishable groups, based on the acknowledgement that

people behave differently and react differently to policy interventions, a market segmentation strategy that now is fairly commonplace in policy making around environmentally significant behaviour. These distinctions mark the start of the introduction of the concept of identity into environmental policy-making, although it was never explicitly recognised as such.

Around the same time as the government was implementing these pro-environmental behaviour change policies, the non-governmental Global Action Plan (GAP) began in the USA in 1989 to provide information, guidance, practical actions, and neighbourhood support for making pro-environmental behaviour changes. In 1994 in the UK, three programmes were started as a part of GAP – *Action at Work*, *Action at School*, and *Action at Home*. *Action at Home* was a six month voluntary scheme which households could sign up to, and which encouraged positive pro-environmental action in the home. After completing an initial questionnaire, participating households received one information pack a month, each pack covering one topic – waste, water, energy, shopping, transport, and next steps. This campaign provided information at a household level and encouraged people to actively participate in examining their own environmental impact (Hobson, 2002).

The *Are you doing your bit?* campaign, along with the *Action at Home* programme and earlier initiatives used ‘soft’ approaches to behaviour change – ‘pull’ rather than ‘push’ measures. These involved giving information and incentives for particular behaviours, rather than applying financial penalties, for example. *Are you doing your bit?* centred around information giving – telling people about small actions they could do, and the consequences of these actions, combined with celebrity endorsement of such actions, and advertisements to make them seem normal.

Inherent in such attempts to change behaviour is an assumption of the rational person model that providing people with more information about the environmental impact of their behaviour will automatically lead to a change in behaviour. Kaplan (2000, p492) argues that this assumption is based on the concept of altruism – the assumption that once people know the situation, for example the extent of the negative environmental and social consequences of excessive car use, they will automatically be motivated to try to put the situation right, by changing their lifestyle even if it is

inconvenient to themselves. This propagates the stereotype of the 'dour environmentalist', which, argues Kaplan, is 'far from helpful' (ibid, p495). Instead, argues Kaplan, what is needed, is model of humans as 'reasonable' people, capable of making judgements and decisions, assuming that people care about the environment, but that they will also make the decisions that are right for them, rather than assuming altruism.

There is little indication that altruism is dominant as a motivator for behaviour, and, indeed, there is evidence that in general, individuals already possess a sophisticated understanding of the environmental and other impacts of their behaviour, and have thought a great deal about these:

'people of all levels of affluence are able, or even keen, to discuss the component issues of sustainable development in a joined up way, if discussions begin from a point near to their daily lives. If people are asked about their concerns relating to where they live, an integrated mixture of social, economic and environmental concerns are voiced, often in terms of rubbish and graffiti, anti social behaviour, or health related issues.'

(Darnton, 2004, p7).

This observation is also supported by evidence from Burningham and Thrush (2001, p19), whose interviewees in deprived areas implicitly 'understood the relationship between social, economic and environmental elements,' and by Hobson's (2003) work, analysing the *Action at Home* programme of the Global Action Plan campaign in 1994.

Hobson argues that the practices actually changed through the *Action at Home* programme were those which the participants 'never thought about' (Hobson, 2003, p104), such as switching lights off, and turning the tap off while cleaning their teeth. By reading the information given in the *Action at Home* packs, such actions were brought into the participants' 'discursive consciousness', 'making participants reconsider what they do and why' (ibid). In contrast, some activities were already part of the participants' discursive consciousness, and these activities proved the most resistant to change through the *Action at Home* programme. These were 'more complex and contentious' practices, particularly transport and shopping (ibid, p105). Shopping already requires some level of everyday thought – for example around questions such as what to make for dinner, what to buy from the shops, which shops to buy from. Transport requires a similar level

of on-going awareness – what time to travel to avoid traffic, which route to take, who uses the car each day and for what. Therefore, argues Hobson, people are more likely to have already considered the debates surrounding these issues, and so by giving people more information, few further changes are likely to be achieved.

Hobson strongly argues that the fact that people are unwilling to change such actions should not imply that they have not thought about the issues surrounding them.

‘[B]ehind a public veil of behavioural inertia there are constructive, discursive processes taking place that are not just focused on individualised consumption but also touch upon the constraints and social implications of the knowledges and practices detailed in *Action at Home*.’

(Hobson, 2003, p105).

Such models still reflect the dominant discourse of individualism (Seyfang, 2004), the belief that people take in information and behave rationally to change their habits accordingly (Macnaghten and Jacobs, 1997, p10). This is also reflected in New Labour’s emphasis on active citizen responsibility (Livingstone et al, 2006).

An internal review of the *Are you doing your bit?* campaign by DEFRA (2003) showed that there was a shift in the awareness of the general public of the effect of simple actions. However, many barriers still needed to be overcome, namely those of inconvenience and inadequate infrastructure. Although the report identified a positive shift in awareness, DETR still believed attitudes needed to be changed before behaviour, and that messages needed to be kept simple, with examples of very easy actions that people could take without too much alteration to their ordinary lives. It was clear after the campaign that a more complex approach would need to be taken to the promotion of pro-environmental behaviour in order to encourage people to change their *behaviour* rather than just changing their attitudes.

The *Are you doing your bit?* campaign, as well as *Action at home*, have focused on small actions by individual people, seemingly with little recognition of the contexts and circumstances in which they act. There are powerful moral and political arguments for protecting and enhancing personal responsibility, since personal agency is a fundamental human

need: 'people generally want to control their own lives' (Halpern et al 2004, p7). An increase in personal responsibility is also desirable from a governmental perspective, since the achievement of some social outcomes requires greater engagement and participation; and placing emphasis on individuals to act, rather than businesses or the government itself, is cost effective and avoids regulation.

The question of how much responsibility *is* placed on the individual to change their behaviour perhaps leads to a question of how much responsibility *should* be placed on the individual. Individual action relies on feelings of efficacy (Eden, 1993), a 'sense that they can have some impact through their behaviour (Bickerstaff et al, 2008, p1313). Bickerstaff et al (2008, p1326) suggest that this efficacy is related to the 'citizen state relationship', and that when there is ambivalence towards this relationship, when individuals feel that the state cannot be trusted to carry out their own actions, then any attempts to promote personal responsibility without addressing this ambivalence will ultimately be ineffective.

The importance of addressing this issue around feelings of personal efficacy and trust of authority has been recognised for some time.

Macnaghten et al (1995, p82) acknowledged that

'[p]eople's inclination to attend to information about the environment is affected strongly by their sense of 'agency' – that is, by whether or not they feel a capacity to influence events associated with that information. They are also influenced strongly by their degree of trust in the *purveyors* of the information.'

The theory of reasoned action (Ajzen and Madden, 1986) emphasised the need for individuals to have the *perception* of their ability to act, and Barr (2004) and Barr and Gilg (2005) acknowledge the importance of efficacy in influencing pro-environmental behaviours. Individual action, then, depends on feelings of agency and efficacy, as well as the ability of the individual to act within the social and material structures they inhabit.

Both the *Are you doing your bit?* and *Action at home* campaigns reflect the assumption of personal responsibility. They also contain an inherent assumption of *agency* – 'individual or group abilities (intentional or otherwise) to affect their environment' (McAnulla, 2002, p271). However, Macnaghten et al (1995, and 2005, p17) suggest that individuals must possess a *sense of agency* – 'whether or not individual or neighbourhood action will be effective, and therefore whether or not it is meaningful to act

and take an interest in available information'. Their research demonstrated that people did not necessarily believe the scientific information given by the government or those in positions of authority, and therefore were not convinced that their own actions would make a difference, and so felt unable, or rather not empowered, to act. This perhaps illustrates the wisdom of promoting pro-environmental actions which have a positive *personal* benefit. For example, actions such as cycling rather than driving may be thought to have a negligible effect on the overall level of pollution or amount of traffic. However, they may be perceived to have a more noticeable positive effect at a personal level, by increasing fitness or reducing financial outgoings. Perhaps what is important here then is the *perception* of the ability to act, which is strongly linked to the perception of the *effectiveness* of that action.

The extent to which individuals possess agency to choose pro-environmental behaviours is affected by the structures they find themselves within. Material constraints may include a lack of availability of public transport, or local food shops, for example, and behaviour is also influenced by working patterns, employment prospects, income, as well as more cultural factors such as traditional gender roles, for example, and even social norms.

It is important to recognise that barriers can be both actual and perceived (Darnton, 2004, p11), and this emphasises the need for a focus on both motivations and barriers, as the two require rather different treatment. Barriers can be both internal and external, but they are 'shown to feed off and inform each other' (Darnton, 2004, p11) in a dialectical manner. So, while external factors can be incentives or disincentives to a specific action, 'they are filtered through a person's perceptions of them' (Darnton, 2004, p11). Therefore, factors that influence behaviour can be considered 'constructs,' 'in that they are not absolute, but are combinations of action conditions and an individual's perceptions of those conditions all rolled into one' (ibid). Darnton gives the example of cost – people often overlook that notions of what is costly are tied in with people's perceptions of what they can afford. This also relates to convenience and comfort – 'ideas of convenience relate to what efforts a person is prepared to undertake to achieve a particular end' (ibid), and what they are prepared to undertake

depends on their circumstances, their social world, their past experience, the availability of resources, and their personal values.

This relational association between internal and external barriers and motivations reflects the dialectical connection between structure and agency. If we adopt a strategic-relational approach to understand this relationship (Hay, 1996, p200), it becomes apparent that '[w]hat constitutes structure is entirely dependent upon our vantage point'. Therefore, structures impose constraints differently on each person by affecting the range of options for action available to them. In turn, people can follow a process of 'strategic learning' (Hay, 1996, p201), enabling them to adopt newer, more effective strategies to overcome structural constraints, and can potentially transform structures themselves.

As Archer suggests, culture is a 'third crucial layer of social reality' (McAnulla, 2002, p290). Dominant ideas in society, relating to car ownership, for example, or bus or bicycle use, both enable and constrain people to differing extents. These ideas can work on a societal level, or at a much smaller, personal level between groups of friends.

Securing the Future (HM Government, 2005) provides a framework for *changing* behaviour which encompasses a recognition of these material and social constraints people act within, the '4Es' model: encourage, enable, engage and exemplify. There is also some acknowledgement of the role of ideas in influencing behaviour. The framework addressed several of the suggestions made to policy makers that policies to change behaviour must be part of a 'holistic' approach to policy making (Lucas et al, 2008, p465). Demos/ Green Alliance (2003, p47) outline conditions under which awareness raising approaches may work:

'awareness is a trigger to action only if costs are not prohibitive, supportive information is in place to make the action convenient, and there is some guarantee that the majority cannot free-ride on the individual sacrifices of the few.'

The 4Es framework aimed to address such suggestions. Government policies that 'encourage' are those that make use of the tax system to provide grants for specific activities (such as installation of solar panels); reward schemes for various pro-environmental behaviours; recognition and social pressures, e.g. league table penalties, fines and enforcement actions.

- Encouragement involves both positive (soft, or pull) and negative (hard, or push) factors.
- Enabling tactics are less forceful than those to encourage, and involve making the social and physical structure more amenable to those wanting to change their behaviour. Tactics that enable include removing barriers to action; providing facilities (for cycling, for example); providing viable alternatives; education and training; and providing capacity (e.g. on public transport).
- Engaging is more about harnessing the collective power of communities to help and motivate individual behaviour change. This would include community action; personal contacts and enthusiasts; media campaigns; opinion formers; and the use of existing networks, such as churches and community groups, to promote change.
- Exemplifying is the final strategy, and involves the government leading by example, both in terms of using its own purchasing power in a pro-environmental way, and by achieving consistency across policies (HM Government, 2005).

For example, the implementation of the London congestion charge has used each of the four 'Es' in conjunction, with a combination of charging, combined with increased provision of buses' together with 'a huge amount of accompanying publicity' (HM Government, 2005, p26). This has had positive effects far beyond the levels forecast, with a 30% reduction in congestion, an increase of 29,000 bus passengers entering the congestion charge zone in the morning rush hour, and a 30% increase in cycling in the capital (ibid, p24).

The DEFRA *Framework for pro-environmental behaviour* (2008) also takes into account the willingness and ability of individuals to act, reasoning, for example, that individuals are already both willing and able to waste less food and manage energy use in their homes; able but not willing to reduce flights; and unwilling and generally unable, for whatever reason, to install private microgeneration. This involves some degree of recognition of the material and structural constraints that may face individuals; a low income, for example.

2.3.2 Changing travel behaviour

Travel has been consistently incorporated into many of the government's attempts to encourage pro-environmental behaviour. *Are you doing your bit?* was not a transport focused campaign, for example, but included many transport actions within an overall campaign, reflecting the mandate of the newly formed Department of the Environment, Transport and the Regions (DETR), and the government's keenness to integrate the environment and transport agendas (DEFRA, 2003, p2). Similarly, DEFRA's (2008) *Framework for pro-environmental behaviour* was not a transport focused campaign, but travel was one of the key areas, and several headline behaviour goals for changing travel behaviour were identified.

Stern's (2000, p407) concept of environmentally significant behaviour when applied to travel behaviour helps to demonstrate that decisions may be made with no reference at all to the environmental consequences which may then go on to have significant detrimental effects. This potentially implies that by removing structural constraints, behaviour may change to become more environmentally friendly, even if this change is not environmentally motivated. This is one of the motivations behind 'soft' policy interventions.

So-called 'soft' factor interventions have played a role in transport policy discussions for many years. Cairns et al (2004, p1) suggest that as yet there is no set definition of what constitutes a 'soft' measure, but they are generally understood to be measures which 'are aimed at producing more reliable information, better informed traveller attitudes, and more benign or efficient ways of travelling.' The Department for Transport commissioned a review of such measures, published in 2004 as *Smarter Choices: changing the way we travel* (Cairns et al, 2004). The aim of the review was to assess the extent to which initiatives which are not focused on directly cutting the speed or cost of travel influence travel choice (Goodwin, 2008a). The report focused on several 'soft' travel behaviour measures: workplace and school travel plans, personalised travel plans, public transport information and marketing, car sharing and car clubs, and telecommunications possibilities, including teleworking, teleconferencing and home shopping (Cairns et al, 2004).

The *Smarter Choices* report contained projections for two policy scenarios over the next ten years: high intensity implementation, involving a 'significant but realistic expansion of activity'; and low intensity, being the projection if 2003/4 levels of implementation were to continue unchanged. The high intensity scenario predicted that implementing a programme of smarter choices would lead to a 20% reduction in peak urban traffic (13% off peak); 14% reduction in peak traffic in non-urban areas (7% off peak); and an 11% reduction in all traffic nationwide (Cairns et al, 2004).

As a result of the *Smarter Choices* report, the DfT created three Sustainable Travel Towns after a national competition in 2004 as a 'real world' test of 'whether it was indeed the case that intensive, town-wide programmes of 'smarter choices' might have such an impact on travel behaviour and traffic' (Sloman et al, 2010, p5). Darlington, Peterborough and Worcester, three medium sized towns in the middle and north of England were given £10 million, and each made their own decisions on how to spend the money, with much of it going towards personal travel planning, then travel awareness campaigns, promoting walking and cycling, and public transport marketing (ibid, p5). Car driver trips fell by 9% per person, car distance by 5-7%; bus use grew by 10-22% (compared with a fall of 0.5% in medium sized towns nationally over the same time period). Cycling trips per head increased by 26-30% (and declined in similar towns nationally), and walking increased 10-13% (compared with a national decline in similar sized towns). Overall, the programme was considered to be successful, leading to a significant reduction in car travel and increase in other methods (ibid, p54).

Softer measures of encouraging changes in travel behaviour were also promoted within other local authority areas as part of the Smarter Choices programme, and as part of the Highways Agency's *Influencing Travel Behaviour* programme (Highways Agency, 2009), with varying degrees of success. A review by the DfT's Operational Research Unit for the Sustainable Travel Initiatives Branch (2007b) suggests a mixed enthusiasm for the smarter choices programme within local authorities. Whilst all Local Transport Plans made reference to smarter choices, with most making a 'reasonable or significant' reference, it was felt that some lacked real conviction (ibid, p6). There appeared to be no general pattern of characteristics indicating the take up of these measures, and review

suggests that decisions were determined by local authority management rather than the specific situations of the areas concerned. The case studies carried out for the same project suggested that work was being carried out in local authorities that was not being reflected in the overall review (2007a, p6), but that local authorities wished for, and would have benefited from, more guidance from national government and more evidence of the effects of implementation (ibid, p9).

The overall positive outcomes from the Sustainable Travel Towns initiative, compared with the somewhat more lacklustre uptake of the Smarter Choices programme within other local authority areas suggest that the implementation of softer measures to encourage pro-environmental travel behaviour change can work, but need the appropriate level of support from national government. The general success of the Sustainable Travel Towns initiative suggests that tackling a number of factors affecting transport at once can have a positive effect on changing behaviour, providing that a lengthy timeframe is allowed. However, focusing on softer measures yet again relies on the individual making the effort to change their behaviour.

Similarly, the results of the Cycling Demonstration Towns project (Cycling England, 2009, p5) suggests success relies on consistent leadership and investment, as well as a combination of soft factors and infrastructure provision. The Cycling Demonstration Towns project also points to the importance of establishing where people travel to and why, before implementing a programme of cycling infrastructure provision, emphasising the importance of taking existing structures of employment and family relationships, for example, into account.

The Smarter Choices programme does differ from earlier behaviour change policies in that it does attempt to remove some of the material structural constraints people face by improving public transport provision, for example, and tackling whole towns at once does perhaps go some way towards removing some cultural barriers associated with cycling, for instance. However, there is still room for improvement, and that may come by acknowledging other structural factors that constrain travel choices.

One significant effect of the evidence around the implementation of Smarter Choices is that it appears that travel behaviour is far more flexible than had been previously imagined (Goodwin, 2008b, p2). This is particularly

because it is becoming more widely recognised that 'travel choice' is not synonymous with 'mode choice', and that travel behaviour is not only influenced by speed and price of transport modes (ibid). Reducing carbon emissions by tackling travel behaviour has been 'considered a rather intractable problem because of the "strength of people's attachment to car use"' (Goodwin, 2008a, p3), but Goodwin argues that this position has perhaps stemmed from the consideration of only a very restricted range of behaviour choices; 'treating behaviour only in the context of immediate constraints and preferences without considering how these change and adapt over time'; and the 'extrapolation of current trends in a way which makes pulling them back seem an impossibly huge task' (ibid).

However, when 'travel choice' is considered to encompass the whole range of choices *around* travel, including where to live and work, the types of activities people participate in, and the places they choose to travel to, there is actually a lot of scope for flexibility, and a lot that can be done to alter behaviour (Goodwin, 2008a, p2). However, this takes time, as responses to changes are often quite small in the short term, but considerably larger in the longer term, 'defined as the period 5-10 years and in some cases longer, in which habits are eroded and new ones form' (Goodwin, 2008a, p2). It is also easier for new habits to form when people are at less stable points in their lives, such as leaving college, marriage, changing jobs, or retirement (ibid, p29).

The evidence surrounding the use and implementation of the Smarter Choices programme suggests that people are very receptive, particularly in the longer term, to such measures, providing that they are implemented alongside other measures to 'lock in' the benefits. When this is the case, as in the Sustainable Travel Demonstration Towns, the results have been largely positive. This illustrates the inherent flexibility of travel behaviour, particularly when it considered within a wider context than just choice between modes. The indications from this evidence are that travel behaviour changes that occur are complex and long term, involving switching between modes, but also changes of destination and trip numbers (Sloman et al, 2010, p8). However, the current aggregate population level data cannot give sufficient detail of *why* these changes take place (ibid); a necessary question if higher rates of change are to be achieved with future policies. There is therefore a need for more detailed

qualitative research exploring travel behaviour more generally at an individual level, looking more closely at what influences such behaviour in the material, social and ideational contexts in which it takes place.

2.3.3 Conclusions

Policy attempts to change behaviour have been largely agency-focused, with an assumption that individuals can and will change their behaviour once they are informed of the environmental impacts of their actions, and given information about the alternatives available to them. There has, until recently, been little acknowledgement of the situated nature of environmentally significant behaviour in general, and travel behaviour in particular. Even the Smarter Choices programme, which did address structural issues, retained the focus on individual agency that had characterised earlier programmes.

Questions still remain about why some people involved in the Smarter Choices programme changed their behaviour, and why others did not. This raises several issues, not least the question of what it is about individuals and their circumstances that makes them more or less responsive to behaviour change strategies. That so much behaviour did not change despite the interventions suggests the possibility that there may be significant material or social structural constraints which remain unrecognised and therefore unaddressed by such programmes. There is a role, therefore, for more in-depth research exploring the contexts of individuals' lives and the situated nature of their travel choices.

2.4 Market segmentation

2.4.1 Segmentation in travel behaviour research

Segmentation has been traditionally used in market research and research into consumer behaviour. It is based on

'the premise that there is little point in addressing the average consumer, or in this context, the average level of car dependence or attitudes to certain policies. Instead, different people must be treated in different ways because they are motivated by different factors and are affected in different ways by policy'

(Hobson, 2003, p66).

In recent years environmental behaviour policy has increasingly focused on consumption, and the problem of how people can be encouraged to

consume sustainably. Seyfang and Paavola (2008, p671) trace the developments in sustainable consumption policy, beginning with the 'cognitive approach' of ecological modernisation which focuses on information provision to individual consumers, relying on them to change their behaviour as a result of this. A social marketing approach is a more sophisticated recent alternative, which 'draws on an appreciation of the rich cultural meanings of consumption to deliver carefully targeting pro-environmental behaviour messages to specific sections of the population' (ibid). This approach, unlike the cognitive approach, does make some attempt to understand the structures and situations individuals find themselves in, but is still 'an approach founded on providing information and expecting individual behaviour to change as a result and so transform the market' (ibid). DEFRA's *Framework for pro-environmental behaviour* is based around this social marketing approach, and has an 'ultimate aim' of improving 'the environment by increasing the contribution from individual and community action' (DEFRA, 2008, p13) – an inherently agency-centred approach.

Market segmentation is the 'act of defining meaningful subgroups of individuals or objects' (Anable, 2005, p66). It is about 'reducing the number of entities being dealt with into a manageable number of groups that are mutually exclusive and share well defined characteristics.' Once this is done, then 'it is possible to make predictions about their responses to various situations, marketing strategies and types of policy' (ibid, p67).

Segmentation in travel behaviour research has primarily been based on one of two techniques – *a priori*, or *post hoc*.

- **A priori** segmentation is when groups are segmented in advance of research based on known characteristics. This sort of segmentation is most often based on socio-demographic information, or on specific behaviours, such as car use.
- **Post hoc** segmentation is when 'empirical investigation using some form of multivariate statistical analysis is used to identify segments' (Hobson, 2003, p67).

Segmentation in travel behaviour research is relatively recent and is becoming increasingly more common. Techniques are becoming more sophisticated, but there has been little attempt to 'define distinct mobility

segments in a systematic and psychologically meaningful sense' (Anable, 2005, p66). It has generally used only a priori segmentation, and the populations are 'rarely grouped according to their motivations, psychological make-up or world views,' which Anable believes is inadequate (ibid).

This acknowledgement of differences between the motivations and actions of consumers is a positive step towards recognition that people are not a homogenous, identical mass, and towards the inclusion of the notion of identity in policy making around travel behaviour. However, there is little recognition that people may not be free to change their behaviour at will because of the constraints of the social, material and ideational world they inhabit. There is still a role, therefore, for a more nuanced approach to understanding travel behaviour at an individual level.

2.4.2 Pro-environmental behaviour segments

This section provides an overview of some of the theoretical developments around the use of segmentation techniques within environmentally significant behaviour research. It also outlines the empirical results and classifications of some research using this approach to illustrate the kinds of factors which emerge as being important.

Darnton's (2004) approach to segmentation is based on his desk study of other research into encouraging pro-environmental behaviours and sustainable lifestyles. His approach to segmentation is a priori – dividing the population into subgroups according to demographic characteristics, as these are perceived to give an indication as to environmental attitudes and behaviour. His recommended key subgroups are: upmarket groups; low income groups; black and minority ethnic groups; older people; younger people; and teenagers (Darnton, 2004, p27), but these groups are not mutually exclusive.

DEFRA's (2008) *Framework for pro-environmental behaviour change* uses population segmentation, but these are defined using post hoc methods. The segments are based on responses to questions in DEFRA's *Survey of attitudes and behaviours towards the environment* (2007), each identified with a representative quotation. They are:

1. Positive Greens (18% of population) - "I think it's important that I do as much as I can to limit my impact on the environment"

- 2. Waste Watchers** (12%) - “Waste not, want not’, that’s important, you should live life thinking about what you are doing and using”
- 3. Concerned Consumers** (14%) - “I think I do more than a lot of people. Still, going away is important, I’d find it hard to give up... well, I wouldn’t, so carbon offsetting would make me feel better”
- 4. Sideline Supporters** (14%) - “I think climate change is a big problem for us. I know I don’t think much about how much water or electricity I use, and I forget to turn things off... I’d like to do a bit more”
- 5. Cautious Participants** (14%) - “I do a couple of things to help the environment. I’d really like to do more, well, as long as I saw others were”
- 6. Stalled Starters** (10%) - “I don’t know much about climate change. I can’t afford a car so I use public transport... I’d like a car though”
- 7. Honestly Disengaged** (18%) - “Maybe there’ll be an environmental disaster, maybe not. Makes no difference to me, I’m just living the way I want to.”

DEFRA has drawn conclusions about the potential of each segment to do more, based on the ‘4Es’ model of behaviour change, drawn from the UK Sustainable Development Strategy, *Securing the future* (HM Government, 2005). This demonstrates how the use of segmentation techniques have enabled the government to develop specific policy initiatives aimed at each segment of the population according to the perceived likelihood of their being influenced by them.

So, in relation to the population segments described, these “4Es” are used to proscribe actions that will influence specific segments. For example, segments 1, 3 and 4 (Positive Greens, Concerned Consumers, and Sideline Supporters) are ‘relatively willing to act and have relatively high potential to do more’ (DEFRA, 2008, p9). Therefore, with these segments, policy emphasis should be on interventions that enable and engage – removing external barriers, for example, and increasing communications.

Segments 2 and 5 (Waste Watchers and Cautious Participants) are already active, but are motivated more by a desire to avoid waste, concerns about the UK countryside, and have ‘concerns about other countries not acting.’ Interventions aimed at this segment should enable, encourage and exemplify.

Segments 6 and 7 (Stalled Starters and Honestly Disengaged) are 'generally less willing to act' and are 'less likely to be open to voluntary engagement or exemplification by others' (p11) – therefore interventions should enable and encourage.

The overall emphasis of this framework is, therefore, to change individual behaviour through a series of small, incremental actions, rather than radical changes in lifestyle. Behaviour formation and behaviour change are viewed as, 'dynamic processes that evolve over time rather than being simple on-off switches' (p20). The depth of this framework illustrates the extent to which the goal of individual behaviour change is now embedded within government strategy and attempts to reduce overall impact on the environment. It also demonstrates the role of segmentation as a technique enabling more sophisticated policy response.

DEFRA's *Framework for pro-environmental behaviour change* demonstrated the importance of theoretical models of behaviour change for 'showing the interactive nature of the many foundations and causes of observable behaviour' and aiding understanding of 'where there is scope to influence people towards more pro-environmental behaviour' (p28). Models also demonstrate which aspects of behaviour are so ingrained in habit or identity that they will require 'deep and repeated interventions' if they are to be changed, which aspects rely on social norms, and

'which are locked in behaviours through the built world, financial constraints or day to day lifestyles which will, for example, require a rethink of working patterns, building design or community'

(ibid).

This acknowledges the importance of recognising the structures of employment, social life and family obligations within which individuals act and make decisions, and the role that these play in shaping their behaviour.

The segments proposed by DEFRA are post hoc segments, developed from the data, and far more complex than those suggested by Darnton (2004). They are based on motivations, behaviour, attitudes and barriers to pro-environmental behaviour, rather than Darnton's demographic divisions. This is a positive recognition of the complexities of individual behaviour and attitudes around environmental issues, as well as an acknowledgement of the complexities of the material, social and ideational structures people operate within. However, the segments are based around pro-

environmental behaviour in general, and it is therefore of use to look at those developed around travel behaviour more specifically, as the two can be contradictory.

2.4.3 Travel behaviour segments

DEFRA's framework covers all aspects of pro-environmental behaviour. The following framework by Anable (2005) is focused specifically on travel behaviour, and identifies six segments based partly on behaviour and partly on attitude to travel mode.

Anable believes that a priori defined groups, like those of Darnton (2004), above, 'are not necessarily homogenous and false assumptions of homogeneity can lead to bias in interpretation and explanation of behavioural tendencies' (Anable, 2005, p67). Therefore, suggests Anable, 'analytical procedures are required that *simultaneously* and *systematically* deal with combinations of large numbers of exploratory variable across a priori classifications.' To do this, 'theoretically derived psychometric measurement and post hoc analytical methods' are required that allow the 'data to speak for itself' (Anable, 2005, p67).

Anable's segments are based on the theory of planned behaviour. This is a modified version of the theory of reasoned action (FISHBEIN AND AZJEN, 1975), which describes how attitude (comprising the anticipated consequences of an action, and an evaluation of those consequences), and subjective norm (comprising normative expectations for an action, and acceptance of those expectations) influence behavioural intention, which in turn influences action. Barr (2004, p3) identifies the most important link in this theory as that between behavioural intention and action – the gap between what one values, or intends to do (which are not necessarily the same thing), and what one does.

The theory of reasoned action was modified by Azjen and Madden (1986) to form the theory of planned behaviour by the addition of 'perceived behavioural control' which acts as 'both a predictor of behavioural intention [and] behaviour' (Barr, 2004, p3). Perceived behavioural control is a person's perception of their own ability to act, and the theory of planned behaviour proposes that, if a person believes they are not able to act, for whatever reason, then both their *intention* and the *action* itself will be affected.

This improved theory of planned behaviour provides a useful if somewhat limited framework within which to examine behavioural intentions in the context of travel choices. The use of policy to influence subjective norms, which was one of the aims of the *Are you doing your bit?* campaign, as well as enhancing perceived behavioural control through reliable infrastructure provision and information, could aid the delivery of a sustainable transport system. However, the theory of planned behaviour does not substantially address the relationship between behavioural intention and action which, as shown by the *Are you doing your bit?* campaign, is crucial for successful policy implementation.

Barr (2004), and Barr and Gilg (2005) have addressed this perceived inadequacy, as well as the increasingly recognised gap between values and action, with the development of a new framework of environmental behaviour, based on the theory of reasoned action. In this new framework, environmental values lead to behavioural intention, and this in turn, along with situational factors and psychological variables, leads to behaviour. This framework recognises three main influences on action (Barr, 2004, p4):

- environmental values – both in relation to the environment itself, and to the relationship between humans and the environment
- situational variables – the individual's social situation and knowledge
- psychological factors – 'personal perceptions of the individual in question that affect their overall behaviour'

Situational variables include the context, socio-demographics, knowledge and experience, which can be either enablers or disablers. Psychological variables can be motivators or barriers, and include altruism, intrinsic motivation, environmental threat, response efficacy, subjective norms, self efficacy, logistics and citizenship (Barr and Gilg, 2005).

There is a recognition here of the complexity of factors that influence environmentally significant behaviour for each individual, and also a recognition that individuals will behave differently according to their situation and values. This framework stresses the importance of addressing an individual's social situation and psychological make up as well as their attitude towards the environment. This acknowledges more depth than the

Are you doing your bit? campaign, but still does not adequately explain how environmental values, situational variables or psychological factors impact on behaviour.

Anable's research yielded six 'relatively stable' groups – four car-owning, two non-car-owning, and each with 'a unique psychographic profile.' These clusters (ibid, p70) are:

- **Malcontented motorists** (30% of population) – 'perceive a high number of constraints to the use of public transport despite feeling increasingly frustrated and unhappy with car travel and believing they have a moral responsibility to change behaviour'
- **Complacent car addicts** (26% of population) – 'admit that use of alternative modes is possible, but do not feel any moral imperative or other incentive to alter their car use'
- **Die hard drivers** (19%) – 'are fond of cars and car travel, believe in the right to drive cheaply and freely and have negative feelings towards all other travel modes'
- **Aspiring environmentalists** (18%) – 'have already substantially reduced their car use largely for environmental and health reasons but appreciate the practical advantages of car travel and are thus reluctant to give up ownership entirely'
- **Car less crusaders** (4%) – 'have sacrificed car ownership for environmental reasons and have positive evaluations of all other modes'
- **Reluctant riders** (3%) – are involuntary users of public transport due to health or financial reasons. They would prefer to travel by car and either aspire to owning a car in the future or accept lifts by car when possible.'

All of the segments are differentiated according to various components of the theory of planned behaviour, as well as additional factors such as 'environmental concern, participation in pro-environmental behaviour and moral obligation' (Anable, 2005, p70). The four car-owning segments display significant differences to each other, as do the two non-car-owning segments, although Anable believes that 'actual control' factors, such as age and income 'have a role in the profile of these groups' (p70).

Apart from this, 'attitudes and opinions cut uniformly across demographic characteristics' (p67). The only demographic variable to distinguish the groups is education, with Aspiring Environmentalists being the most educated, Complacent Car Addicts the least educated, Car Less Crusaders and Reluctant Riders being similar to each other and different to the others. The Reluctant Riders group were also older than the other groups (ibid, p71). This suggests, says Anable, that 'personal characteristics are not an important determinant of attitudes or any differences in behaviour found between segments or equivalent vehicle availability' (p71).

The non-car-owning segments here are such a small percentage of the whole population, possibly a reflection of travel modes used in general to visit National Trust properties, where Anable's sample population was drawn from, and which are generally not well served by public transport. Also, in the general population, the proportion of people without cars is much higher, and there are potentially more reasons than the two given in this framework.

It is striking that 'without incorporating perceived behavioural control, many of the groups would appear to behave inconsistently with respect to their attitudes' (Anable, 2005, p74). Perceived behavioural control is the factor added to the theory of reasoned action to make the theory of planned behaviour, and refers to the level of control people believe they have over what they can do. So, for example, Malcontented Motorists, unhappy with their level of car use, also feel that they cannot alter their behaviour, because they perceive that the alternative, in this case public transport, is not adequate to meet their needs. They have a lack of agency to change their behaviour within the structural context they occupy.

This also raises an issue about the relationship between intention and action. Malcontented Motorists and Complacent Car Addicts have very different attitudes towards their car use, but their behaviour is the same, and so the ecological impact of the two groups is similar. This therefore raises the question of whether *intentions* or *actions* should be measured, as people may have similar intentions but different actions, resulting in different impacts, or may have different intentions but similar actions, resulting in similar impacts. This is why, according to Anable, it is important to segment on the basis of attitudes rather than behaviour. However, this is

also the reason that a more nuanced exploration of travel behaviour is necessary if attempts to influence it are to be successful.

The segments discussed so far were developed from relatively large scale quantitative research, and there are therefore limits on the detail of the information they are based on, as this relies closely on the design and structure of the research and the research instruments themselves. More recent work is perhaps developing more sophisticated methods. For example, the ESRC funded Promoting Sustainable Travel (ProST) project combines both qualitative and quantitative methods with the aim of developing a series of categories based around both lifestyle and mobility, to be used as the basis for a social marketing around sustainability (Prilwitz and Barr, 2009).

The effectiveness of segmentation as a marketing technique is currently being assessed by the Segmented Marketing for Energy Efficient Transport (SEGMENT) project, which will be testing Anable's methodology. The focus will be on both developing clusters of consumers based on attitude surveys, and on targeting those consumers at periods of change in their lives (SEGMENT, 2010). There is an acknowledgement that the attitudes within each segment are not necessarily homogenous, but the project aims to develop behaviour change initiatives with a more targeted approach, and therefore a greater chance of success. However, the focus of the project is on overcoming 'perceptual or attitudinal barriers to the uptake of sustainable and energy-efficient mobility' (ibid), and therefore, like earlier behaviour change programmes, emphasises the responsibility of the individual for changing behaviour, with very little acknowledgement of the structural constraints that individuals act within.

Market segmentation techniques are becoming more sophisticated, and allow behaviour change initiatives to be targeted more specifically at population groups who are most likely to be affected by them. This makes the management of behaviour change in a policy context more nuanced. However, segments are clustered around a specific type of attitude – around travel for example – and this does not allow for much detail around the context within which people live to be identified or taken into account. Segmentation is often based on either attitudes or behaviour, and previous research has demonstrated that these are not necessarily connected, so

there is a possibility that within segments there may be significantly different attitudes or behaviours.

It is therefore important to explore travel behaviour at a more individual level in more detail, as this will allow for the situation of the individual within the material, social and cultural context in which they live, and for these factors to be taken into consideration for the effect they may have on influencing travel behaviour.

2.5 Conclusions

Transport policy in the UK transport from the 1950s has undergone a significant shift in emphasis from an infrastructure-based approach of predicting traffic flows and providing new roads and other infrastructure to meet demand, towards a focus more on the responsibilities of individuals to change their own behaviour. This mirrors approaches used in environmental policy more widely, and reflects an agency-centred approach, with assumptions made that individuals are both willing and able to change their behaviour on receipt of important environmental information.

However, a significant body of evidence has suggested that individuals largely do not in fact alter their behaviour because of new environmental information, and that even relatively strong environmental values are not necessarily reflected in behaviour.

What has emerged, then, is a recognition of the agency-centred nature of many policy attempts to change travel behaviour, which contrasts with the reality of everyday lives constrained and shaped by the influence of material, social and cultural structures. This is problematic because without addressing the material and cultural constraints that people's travel behaviour takes place within, attempts to change that behaviour will be unsuccessful. It appears that travel choices are shaped by and within structures, both material and cultural, and these structures are in turn shaped by travel behaviour, in a reciprocal process which can take many years to break down.

More recently, the relative success of the Department for Transport's Smarter Choices programme has suggested that travel behaviour is in fact malleable given a long enough time frame, and the significant alteration of

various structural constraints which restrict individual behaviour. Attention needs to be paid, therefore, to the specific roles of such constraints within people's everyday lives at a more individual level. The suggestion that travel behaviour can both be influenced, and changes over time, demonstrates the fluid nature of the constraints individuals experience, that people experience different constraints, and in different ways, at different periods throughout their lives. The way individuals themselves respond to constraints is also important: some people appear willing to adopt new behaviours, whereas others find this very difficult or impossible.

There appears to be a reciprocal relationship between practice and theoretical developments around behaviour change. Theoretical models around pro-environmental behaviour change in particular have increasingly adopted an approach which acknowledges the social and material situations individuals live in as contexts in which their behaviour takes place, as a response to the recognition of the value-action gap. Both practice and theory are beginning to recognise that environmentally significant behaviour in general, and travel behaviour in particular, are significantly context-dependent, and that individuals make decisions that are situated within the material and social realities of their everyday lives. Yet there are limitations to the extent to which these material and social realities are understood at a very individual level, as much of the existing research is based on aggregate approaches to population segments. There is, therefore, a role for further exploration of these realities and contexts at an individual level.

What emerges from this discussion are questions around the way that material and cultural factors both enable and constrain individuals' travel behaviour, the way that people live within and are shaped by the constraints around them, how they adapt to these constraints, and how and why material and cultural factors influence individuals differently. In order to answer these questions, it is useful to turn attention to the individuals themselves as they exist within these structures, and to explore in more detail how they are situated within structures, and the way those structures shape the decisions that they make about how, when, where and why to travel.

3. Individuals and identity

3.1 Introduction

The previous chapter set out the variety of ways in which theorising around travel behaviour and policy has developed in recent years. Recognition of the gap between environmental values and travel behaviour has led to more research focusing on both the barriers and motivations to changing environmentally significant behaviour in general, and travel behaviour in particular.

Such research has identified the importance of physical, social and cultural realities in shaping travel behaviour. However, until relatively recently, significant responsibility was still placed on individuals to alter their travel behaviour, without recognition of the structural constraints they live within.

More recently, travel behaviour research has used market segmentation techniques to explore how different segments of the population travel. This demonstrates a welcome infiltration of the concept of identity into travel behaviour research, in that it is recognised that individuals are not all motivated by the same factors. However, this infiltration is in its infancy, and there is the potential for much development. At the same time, more sophisticated travel behaviour campaigns by the government, such as the Smarter Choices campaign, and the development of the Sustainable Travel Towns initiative, have shown a more nuanced understanding of the structural constraints which shape individual behaviour, and have gone some way towards mitigating or removing material constraints by improving public transport provision, for example, and providing better facilities for cyclists. However, emphasis is still placed on individual responsibility or changing behaviour.

There is, therefore, a need for an exploration of individuals and their travel behaviour within their differentiated circumstances and contexts. This chapter explores the nature of that relationship in terms of travel behaviour and everyday life, focusing on the way conceptions of time and space have changed with changes in travel technology and behaviour, the links between telecommunications and travel, and the way that places themselves have changed as behaviour patterns have altered. Following this, the chapter will shift to focus on identity, as this has implications for understanding individual responses to policy interventions around travel

behaviour. This research will be situated within the context of identity theories, before moving on to the development of a more specific framework for this research. Harré's work will be introduced as a workable, realist model of identity that can be used to explore the role that identity plays in shaping travel behaviour.

3.2 Travel behaviour and everyday life

Ellegård (1999, p167) defined everyday life as 'all activities performed by an individual', but it is perhaps more useful to think of Jarvis's concept of the infrastructure of everyday life: 'encompassing all that it takes in a practical sense for individuals and households to "go on" from one day to the next' (2005, p135). This highlights

'the way this social and material context (which may be enabling or constraining) shapes individual choice over time-use. It also shows the corollary: that the solutions people arrive at to co-ordinate activities (taking the car rather than the bus to work so as to visit a sick relative on the way home) in turn shape the social and built environment'

(Jarvis, 2005, p135).

This concept is useful in addressing one of the key questions of social research on transport – why do people in seemingly similar situations act in different ways?

3.2.1 Time and space

Advances in travel and technology have changed perceptions and use of time and space. This has had significant impacts on the lives of individuals. Urry (2005, p29) describes the significance of the shift from the 'objective clock-time of the modernist railway timetable,' in which everyone worked on the assumption of the same time, to 'personalised, subjective temporalities, as people live their lives in and through their car(s) (if they have one)' (ibid). These personalised temporalities free individuals from 'some of the existing spatiotemporal restrictions of pre-automobilised times' (Beckmann, 2001, p600), such as public transport timetables, and insurmountable distances between places.

'Car drivers can leave and arrive more or less when they want, they have no connections to miss and few constraints...'

(Shove, 2002, p6).

This flexibility encourages ‘the fragmentation of episodes into smaller and smaller “units” thereby increasing the challenge of coordinating what become separate events’ (ibid). Individuals are not necessarily restricted by timetables, and far less restricted by distance than at any time in the past, so appointments can be scheduled spatially further and temporally closer, ‘giving way to a twenty-four hour flux of possibilities’ (ibid). Also, extraordinary events become normal – a working lunch, or a day trip to Brussels, or commuting sixty miles to work each day. This flexibility can in turn become binding, locking individuals in to a pattern of travelling long distances in short time frames which they find it difficult to escape from.

‘Automobility coerces people to juggle fragments of time to assemble complex, fragile and contingent patterns of social life.... Automobility therefore produces desires for flexibility that so far only the car is able to satisfy.’

(Urry, 2005, p29).

This ‘flux of possibilities’ is only available to car drivers, as users of public transport are still constrained by timetables and availability of services. Even those with cars are still constricted by structural elements of car transport, including traffic and costs of fuel, as well as other elements of life – employment, for example, is rarely flexible enough to allow twenty four hour freedom in the scheduling of other activities. People have commitments to caring for children, or elderly relatives, or pets, and at the very least must sleep and eat themselves at regular intervals. These will be explored in the rest of this chapter.

It is generally understood and accepted in transport research that there is a time squeeze – more activities being slotted into less available time. However, Jarvis (2005) argues that this indicates a preoccupation with the time allocation of activities, particularly in relation to employment and the ‘work-life balance’, and emphasises the speeding up of society, which focuses attention away from the obstacles that slow people down (p134). In these terms, research around travel behaviour addresses why people feel rushed and pressurised into adopting longer working patterns, but not what constraints delay people as they try to conduct various activities. This relates to Urry’s (2005, p29) notion of ‘coerced flexibility’, and the desire to fit more activities into what becomes an increasingly constrained amount of

time means that people are forced to become more flexible in their scheduling, which in turn forces use of the car.

Mobility is also vital for interaction (Beckmann, 2001, p600), and '[c]ars extend where people can go and hence what they are literally able to do' (Urry, 2005, p28).

'Much "social life" could not be undertaken without the flexibilities of the car and its 24-hour availability. It is possible to leave late by car, to miss connections, to travel in a relatively time-less fashion'

Urry (2005, p28).

Aspects of identity are recognised as being significant here, particularly with reference to specific groups, for example the young, the poor, and women. For example, cars are significant in maintaining and developing the social networks of young people, who may be 'hugely involved in the negotiation of complex networks of family obligation' (Carrabine and Longhurst, 2002, p190). The more individuals are coerced into relying on the flexibility of the car, the more those who do not have cars are marginalised. This raises questions issues around social inclusion – it is often poorer people who do not have access to cars (Friends of the Earth, 2001, p9), and they therefore become if not excluded, then marginalised from everyday 'normal' activities which have been situated and scheduled with the car in mind. However, not all people on low incomes are marginalised in this way; the issues are relational, as people are situated within a complex set of individual circumstances, and develop strategies to deal with these circumstances.

In deciding on the best use of time and appropriate transport, people have to negotiate the relationships in their lives too, as these affect what they do and when and how they can do it. Jarvis (1999, and 2005) describes negotiation and resource distribution within households through the concept of household decision making.

This begins to address the negotiations both in terms of time and space, and in terms of the distribution of resources between members of a household (Jarvis, 2005, p137). In this,

'attention is paid to the critical role of spatial arrangement whereby the *distribution* and "spacing" of jobs, housing and services within a particular area determine the working time arrangements and childcare options *actually available* to households managing two jobs or careers from a fixed residential location'

(Jarvis, 2005, p141).

This issue has been particularly considered in relation to women's travel – it has been argued that 'choices' are not equal – that women do not have the same degree of control or access to private transport as men do (Hamilton and Jenkins, 1989, p21). Turner and Grieco (2000, p132) describe the transport deprivation suffered particularly by women in low income households which

'may take the form of women's use of inferior modes of transport, or it may take the form of women's journeys having multiple purposes and thus generating greater anxiety in the travel context as to whether all goals can be met within the schedule'.

Now many activities can be performed electronically, including banking, making medical appointments, shopping, and teleworking, and Turner and Grieco (2000, p134) argue that this has the potential to reduce the number of short trips women make, thus reducing the amount of time they must spend travelling, particularly when much of this particular population do not have access to a car.

Home scheduling technologies provide a solution to the 'two keys to the alleviation of women's time poverty in the UK: the ability to substitute tele-journeys for real journeys, and the ability to summon low-cost, flexible and responsive transport on demand' (Turner and Grieco, 2000, p135). Such technologies have been developed for higher income homes, and include – 'in-home networked terminals which connect with public information and reservation systems such as transport and health services' (Turner and Grieco, 2000, p131). Flexible, demand responsive transport will enable women to summon transport, generally by using the networked terminal to access 'demand-responsive public transport – public transport which is designed for transporting children from home to child care centre' for example, when they need it, without needing to pay for expensive taxis (ibid). This can overcome the problems faced by single mothers, for example, when considering returning to work, such as child care, and crisis situations (Turner and Grieco, 2000, p130), giving a greater degree of transport flexibility, reliability and affordability, and allowing 'those community members with highly constrained time-budgets to meet their obligations without experiencing transport stress' (Carter and Grieco, 2000, p1740).

A difficulty with approaches that focus on gender and talk about 'women's travel' is a tendency to prioritise that one aspect of a person and the role it has in shaping their behaviour and available options. Individuals are multifaceted, and have many influences and constraints that shape their travel behaviour. People use their time differently even if they are seemingly in similar situations.

Axhausen et al (2006, p5) suggest there is a need to combine transport research with lifecourse research in order to assess how people travel differently over the course of their lives. Pooley et al (2005, p134) suggest that this everyday travel is bound up with stage of life, particularly for women, who may be constrained with childcare responsibilities at certain times. This approach captures more detail of individuals' circumstances, demonstrating that a young couple with children, for example, will have different travel needs, priorities and therefore behaviours to a retired person, but again, there are still generalised assumptions underlying this approach which place significant emphasis on one aspect of a person – in this case their life stage – in determining their travel behaviour.

As a response to differing circumstances, households develop strategies (Jarvis, 1999, p228), 'sets of normative rules and decisions governing the behaviour of individuals within household groups'. Decisions are made within households, and by individuals, that involve trade offs and negotiations at both levels. These strategies are situated within complex networks of close relationships and wider society (ibid), as well as social spatial relationships (ibid, p242). It is also useful to explore strategies at an individual level as resources are not only shared within households, and responsibilities and obligations extend beyond the boundaries of households, perhaps to aging family members or employers. Jarvis therefore suggests that households are neither 'helpless victims' nor 'masters of the universe', but rather have some degree of control over their travel behaviour, within the context of their situations (1999, p228).

Hagerstrand (1970) describes three types of constraints which may affect individual activities: capability constraints, coupling constraints and authority constraints. Capability constraints 'limit the activities of the individual because of his biological construction and/or the tools he can command' (Hagerstrand, 1970, p12). These can be time based, for example the necessity of sleeping for several hours each day, and eating at

regular intervals, or distance based, affecting the distance a person can travel within a given time – although this has been extended with advances in technology and telecommunications. Coupling constraints ‘define where, when and for how long the individual has to join other individuals, tools and materials in order to produce, consume and transact’ (ibid, p14). Authority constraints refer to the access individuals have to a given ‘domain’, a ‘time-space entity within which things and events are under the control of a given individual or group’ (ibid, p16).

These different constraints act together to impact on the mobility of individuals and households, so for example a poorly paid job may lead perhaps to an inability to rent or purchase a house close to the workplace, meaning a longer commute, and therefore less time to spend on leisure activities. Again, the availability of activities and resources within a given space is a key element of this.

3.2.2 Telecommunications and travel

There has been considerable research interest for several decades around the interaction between telecommunications and travel, particularly as a result of the growing awareness of the full social costs of travel and the rapid transition into the ‘information age’ (Mokhtarian and Salomon, 2002, p144). Using telecommunications in various forms has been suggested as a potential alternative to increases in travel times and distance, thus potentially overcoming some of the more practical constraints on travel, but there is ongoing debate about the extent to which this has happened, or can happen.

Banister (2005, p171) makes a useful distinction between the role of technology *in* transport and *on* transport:

‘technology has been (and still is) enormously influential *in* transport, and perhaps this is its main role, namely to influence the operation of transport systems, to provide in-vehicle monitoring and control systems, and to provide information to users of all transport systems. This may be more important than that *on* transport.’

Technology *in* transport creates new opportunities for journey planning, including real time information, and facilities for booking train tickets for example, with the intention of increasing reliability of public transport services, and therefore increasing modal share (Banister, 2005, p179). Telecommunications played a role in the Smarter Choices programme in

this way, by providing real time information about bus routes, for example. The use of the internet for journey planning is hoped to increase modal shift away from the car 'for some people, some of the time, in some situations' (Lyons, 2002, p341). In private transport, technology can give real time information about traffic, hazards on the road and adverse weather conditions that can assist with journey planning and reduce delays.

The role of technology *on* transport is less straightforward. Banister (2005, p169) predicts that 'technological change will fundamentally influence the location of economic development, and the function and form of cities,' but there is little conclusive evidence of how this is taking place.

Four main types of relationship between telecommunications and travel have been identified (Mokhtarian and Salomon, 2002):

1. **Substitution:** reduction or elimination of travel as activities can now be carried out remotely
2. **Generation/ complementarity:** stimulation of more travel as time or transport options become newly available
3. **Modification:** alteration of routes, modes or times of journeys that would be made anyway
4. **Neutrality:** no impact on travel

Actual direct substitution, for example replacing physical commuting with teleworking, or travel to shops with internet shopping, requires a degree of similarity between the two activities, and recent evidence points to a more subtle interrelationship that does not facilitate direct substitution. Meeting a business contact or friend through the internet, for example, can lead to direct travel to meet them, and coordination of meetings is made more efficient by the use of telecommunications to confirm arrangements beforehand (Mokhtarian and Salomon, 2002, p146). This suggests that there is perhaps a limited potential to replace existing journeys with telecommunications.

Banister (2005, p179) talks of 'e-everything' – shopping, banking, education, entertainment, working, and how short term changes may be considerably different to longer term changes as ICT becomes embedded in lifestyles. This may possibly lead to longer journey patterns, or perhaps

innovative forms of car sharing in cities especially, leading to lower car ownership levels.

Teleworking is an example often discussed in literature around telecommunications and travel as an area with the a high potential for substitution of travel by telecommunications. Commuting is the second most frequent activity undertaken in terms of travel (after shopping), with 70% of commuting journeys made by car (Lyons, 2002, p338). As such, it is an attractive prospect to have these journeys reduced considerably by an increasing in working at home and less business travel. The proportion of people working from home at least once per month increased from 10% in 2002 to 12% in 2007 (DfT, 2009). While teleworking is often considered in terms of being a full time activity, many jobs have some elements which can be done from home, particularly with widespread availability of the internet and email. 'In effect, the Internet is diminishing the importance of spatial location for working' (Lyons, 2002, p340).

Teleconferencing has the potential to reduce lengthy business trips in an age where globalised business is increasingly common – although 'key meetings need face-to-face contact and this in turn may result in longer travel distances, as businesses have become more global (Banister, 2005, p186). In the longer term, if teleworking becomes more common, it may influence decisions around residential location, with people being willing to consider living further from work, leading to even longer journeys (Banister, 2005, p188).

Overall, it seems,

'as telecommunications demand increases, travel demand increases, and vice versa' – but this study doesn't 'identify the individual proportions of substitution and complementary impacts of telecommunications on travel, and vice versa'

Choo and Mohktarian (2007, p15).

In reality, there are differences between the telecommunications-travel relationship at a macro level and at an individual level. ICT and transport innovations are facilitating decentralisation and changes in land use, for example, but this may have complex effects on individual behaviour. There may, for example, be fewer journeys to work each week with increases in teleworking, but these journeys may be much longer, and lead therefore to an increase in overall distance (Banister, 2005, p171). Alternatively, the

new availability of a previously used car during the day may release latent demand in family members for use of the car (ibid). Changes in the nature of the labour market, and the nature of work more generally, from manufacturing to a more service based economy may also mean an increase in teleworking, coupled with less frequent, but longer, commuting distances (ibid, p174). In addition, teleworking is more common among higher income workers, and is often a strategy to manage travel rather than reduce it (DfT [Public experiences of home working and internet shopping], 2009, p17).

The implications of this for transport policy are unclear. Choo and Mohktarian (2007, p17) point out ‘the difficulty of attempting to decrease travel through various policy instruments, while simultaneously trying to stimulate telecommunications activity’, since their research suggests ‘that stimulation of the demand for telecommunications will lead both directly and indirectly to the generation of more travel.’ The internet in particular does not have a high cost as other potential measures to alter travel behaviour do, and so Lyons (2002, p344) suggests that the response of transport policy to the internet in particular should be:

1. to seek to accentuate the positive effects of substitution
2. ensure that newly generated travel demand is met through walking, cycling, public transport.

There is a differentiation between mobility for the sake of mobility, and mobility to achieve accessibility, as the two have rather different implications for the promotion of pro-environmental behaviour. Levine and Garb (2002, p187) argue that:

‘the view of transportation demand as derived from people’s desire to access destinations is an underpinning of current transportation policy and practice in that it forms the basis of the modelling of travel demand on the basis of land use patterns’

(Levine and Garb, 2002, p187).

Assumptions are made that demand for transport is given, although it is actually bound up with all kinds of social and spatial conditions. Many journeys that are now made by car were previously not made at all, so the amount of induced traffic has increased (Vigar, 2002, p12). Workplaces are increasingly divided from homes and leisure sites by land use patterns, creating what Urry (2005, p28) describes as ‘new socialities of commuting,

family life, community, leisure, the pleasures of movement and so on.’ Because of this increasing distance between the places of people’s lives, the use of a car becomes a necessity for much travel – ‘much “social life” could not be undertaken without the flexibilities of the car and its 24-hour availability’ (Urry, 2005, p28). Section 2.3.2 discusses the ways in which places have changed over time, and how this has influenced patterns of mobility and necessity.

For some activities, telecommunications will never be a full substitute for travel, as those activities may fulfil several purposes that cannot be entirely replicated by telecommunications.

‘[W]hilst virtual substitutes may be effective in meeting the *functional* requirements of activities (eg “I go shopping to replenish the household food stock”) they may well fall short of meeting other *social* or *psychological* requirements (eg “Going shopping is a chance to get out of the house and see and meet people”).

(Lyons, 2002, p342).

As such, shopping orders over the internet will never entirely replace physically travelling for shops (Mokhtarian and Salomon, 2002, p170, Banister, 2005, p172).

Banister (2005, p187) highlights the implications of this for transport analysis, as ‘most conventional analysis is based on the premise that travel distances should be short and that travel time should be minimised’ (ibid). Instead, transport analysis should recognise that travel is sometimes a goal in itself, not just a means to an end. It is also important to note the role of multi tasking – undertaking several activities whilst travelling, such as working on a train journey, for example, or even whilst driving on the motorway (Laurier, 2005). The ability to undertake useful activity whilst travelling can considerably affect choice of modes (Lyons and Kenyon, 2007). However, there is little understanding of how individuals make such choices at present, due to the inability of current data collection methods such as activity/time use diaries to collect information about secondary and tertiary activities carried out whilst travelling (Mokhtarian, 2009, p434).

Transport analysis needs to replace

the notion of a single activity (travel) being carried out at a particular point of time [with] a more flexible notion of virtual travel and of multitasking when travelling’

(Banister, 2005, p190).

Concern has been raised that reductions in some, particularly longer trips, such as those caused by an increase in teleworking, may lead to situations where other members of households increase their car use due to the new availability of a car during the day, for example (Goodwin, 2008b, p237). However, Cairns et al (2008, p606) suggest that in fact, particularly in the case of teleworking, changes in car use by others did not substantially offset the reductions in car use, and indeed in some instances, car use in general by households of teleworkers reduced overall.

It has been suggested that telecommunications can play a particular role in increasing social inclusion for those whose lives are constrained by lack of easy access to a range of travel choices. Technology is often expensive, and although mobile telephones are now common, and the internet can be accessed for free at local libraries, there are people who have less ease of access to telecommunications, and therefore the benefits that they bring.

3.2.3 The changing nature of places

People travel between places, and there is a reciprocal relationship between people and the nature of the places they travel to. The mobilities literature (notably Urry, 2005) argues that places become designed for cars, and those without them are excluded, or discouraged, from using such places. This has created a series of places which are difficult to travel to without cars, such as out of town shopping centres. Urry (2005, p28) describes this as a significant part of the 'system of automobility.'

'Automobility divides workplaces from homes, producing lengthy commutes into and across the city. It splits homes and business districts, undermining local retail outlets to which one might have walked or cycled.... Members of families are split up since they live in distant places involving complex travel to meet up intermittently. Automobility is thus a system that *coerces* people into an intense *flexibility*.'

So cars are convenient, therefore people use them, and places change to accommodate them, and then they become necessary, and it becomes very inconvenient not to have one. This is a cyclical process, and some people are excluded from it altogether, not having access to motorised transport at all. This is also an important process to acknowledge if the cycle is to be broken, and if demand for transport is to be managed, it is vital to identify the sources of that demand.

Hagman (2004, p1) raises a central question: 'how [is] transport demand... generated by the ways people live in the places they live, and what actions [do] they take to satisfy this demand'? This puts the emphasis for some of the demand for travel back onto the places themselves, and the activities individuals have to undertake in order to go about their daily lives, rather than merely seeing 'driving' as a separate activity which people undertake at will and are reluctant to be persuaded out of. Hagman (2004, p1) poses a series of questions, the answers to which shape the way that we understand how people live in places:

'Why do they live there and how do they organise their lives from there? What other places do they need to visit or communicate with in other ways? How do they choose between the different means of transportation or communication available? How do they look upon the place in relation to other places?'

Hagman's basic assumption 'is that people do not just "reside" in the places where they live. They create the places in relation to themselves and other places through action and interaction' (p3). In addition, people's 'use of these places is dependent on their individual interpretations of the place and its resources, which shape the strategies they take on to fulfil their wants and needs' (p20). The resources that are available in places, therefore, are vital in shaping how people feel about them, interact within them, and use them.

Hagman's questions raise several important points. The significance of place and individuals' relationships with it for shaping travel behaviour is a key factor. Hagman also points to the importance of individual motivations for both mobility decisions and for the way that people live in, and interact with, place, as well as the importance of places themselves, and the facilities they contain. Hagman paints a picture of people acting individually, within structures, but not necessarily being bound by those structures in the inevitable way that the sociology of mobilities literature perhaps suggests. This emphasises the necessity of looking at individual circumstances and situating these within the physical and social world.

Another significant aspect of the relationship between mobility and place is the impact that actual modes of transport themselves have on places, rather than the whole system of automobility. Moving traffic is dangerous, 28,500 people were killed or seriously injured on roads in 2008 (DfT, 2009). Children's mobility is increasingly under surveillance by parents because of

perceived dangers from traffic and strangers (Fotel and Thomsen, 2004), and 'especially for the non-car-user roads are simply full of moving, dangerous iron cages' (Urry, 2005, p29). What were once largely public spaces, argue Sheller and Urry (2003, p11), are transformed into public roads, once again marginalising people who are not travelling in cars, and contributing to the cyclical process of cars becoming more and more desirable and necessary.

However, there may be an element of the impersonal nature of cars contributing to the feeling of threat felt by other road users. Drivers are exempt from 'normal etiquette and face-to-face interactions with all those inhabiting the road' (Urry, 2005, p29) – no eye contact, no everyday formalities, no smiles (Featherstone, 2005, p12). For this reason, as well for the lesser threat they pose to the environment and health in particular, it has been suggested more active modes of transport, such as walking and cycling, might be more appropriate within communities:

'riding a bicycle necessitates encounters with others; although a form of "private" transport, the bicycle arguably embodies a much stronger "public" orientation than the car. By cycling, one is "re-peopling" and "re-humanising" the cityscape'

Horton (2007, p46).

Here, the act of cycling takes on a more significant role than just as a mode of transport, illustrating how the context of mobility actions can affect their meaning.

The relationship between people and place, encompassing travel, is an interactive one. Travel affects place, and place shapes travel behaviour particularly with respect to the availability of resources. The trip to buy food is one that illustrates the disparity between resources available in places most clearly. According to the DfT (2007, p60), the proportion of food shopping trips made by car has increased from 57% in 1995/7 to 65% in 2007. This is indicative of changes in retail facilities which have created 'food deserts' (Dowler et al, 2001), areas where no fresh fruit or vegetables are sold, or where a limited range is available at an inflated price (Donkin et al, 1999, p563). Food deserts may be geographical, financial, or caused by other factors (Whelan et al, 2002, p2096). Such areas contribute to an iterative problem: food is unavailable, so those who can drive further to buy it do so, reducing the viability of local shopping facilities, which then close,

leaving those who do not have access to a car also without access to fresh food.

In summary, place and travel interact in a number of ways. Places alter over time with changes in transport use, particularly the increase of the private car. This in turn expands the opportunities for travel for some people, and widens the variety of places they can travel to. This can shape the character of both the places travelled to, and the places abandoned. Perceived dangers within place, from traffic, and from other people, shape the way places are used, again in turn influencing the character of those places.

Much policy and research attempting to tackle the environmental problems caused by increased motorised transport has focused on changing individual travel behaviour. In contrast, the sociology of mobilities literature argues that the 'system of automobility' shapes both places and the way individuals organise their lives and travel behaviour. However, some authors, notably Hagman (2004), argue that people's responses to resource availability constitute a level of individual engagement with place, an exhibition of individual agency to respond differently to cultural, social and physical structural constraints and pressures which promote car use.

3.2.4 Contradictions

At a societal level, the desire for increased mobility must be balanced against negative environmental effects such as climate change. At a more local level, an increased need for accessibility conflicts with the danger, health and localised environmental impacts of new road schemes. Perhaps part of the problem with dealing with increased environmental concern and the environmental impact of transport lies in the seemingly inherent contradictions between the two.

Conflicts and contradictions also arise at an individual level. For instance, Miller (2001, p28) describes these conflicts between

'an ethics which is concerned with aggregate effects of personal action on the world at large and a moral that sees caring in terms of more immediate concerns such as one's partner or children. Thus the problem becomes one of whether we make a special car journey with adverse environmental effects because otherwise we feel we are exposing our children to discomfort or even danger.'

This is not the case with every journey, but Miller's comments highlight the contradictions that may be felt by individuals in relation to transport and the environment. Environmental values may not be translated into action, but this may be because of internal contradictions between obligations to other people, commitments to work and family, and concerns about safety, as well as a real lack of choice and control over behavioural options.

Feelings about the environment and using the car create internal contradictions.

'[M]ost ordinary drivers, even though they are fully aware of the power of dominant anti-car discourse, still express a much more ambivalent and nuanced discourse of the car that allows them also to acknowledge the benefits that clearly accrue to them from car ownership.'

(Miller, 2001, p9).

Car users recognise both personal and environmental disadvantages, but the individual benefits of increased mobility are stronger (Whitelegg, 1997, p22). As individual drivers generally do not have to face the externalised environmental costs of driving, driving embodies the contradictions between 'private pleasure and public vice' (Miller, 2001, p13). In addition, Sheller (2004, p229) argues that

'[a] key overlooked aspect of car cultures is the emotional investments people have in the relationships between the car, the self, family and friends, creating affective contexts that are also deeply materialised in particular types of vehicles, homes, neighbourhoods and cities.'

These relationships are part of the complex context within which decisions about how to travel are made.

Advances in travel and technology have changed perceptions and use of time and space, which has in turn had a significant impact on the lives of individuals. Increased availability of private transport has led to the expectation of enhanced flexibility, which has placed burdens and inconvenience on many, particularly those without access to a car. The results of the Sustainable Travel Towns initiative suggest that travel behaviour *is* flexible, but that it takes time to change.

3.2.5 Conclusions

Individuals are situated within different contexts in terms of place, family responsibilities, employment obligations, and social situations, and so have different opportunities to change their travel behaviour. Cultural expectations and individual values can be as significant as material constraints when it comes to changing travel behaviour. Individuals are situated, willingly or otherwise, in a web of employment obligations, household and family responsibilities, and economic situations that both enable and constrain their travel choices, and make attempts to influence them difficult and complex. Technological developments have the potential to remove some of these restrictions by enabling home shopping, teleworking, and demand responsive transport, for example, and there have been suggestions that this could have a positive effect on the travel choices of low income women in particular. However, there are still questions around the availability, cost, and ease of use of such technology, and as yet it cannot be relied upon. In addition, social networks are built around both places and transport options, and take many years to unravel and fit with new transport modes.

Therefore, when researching where and how people travel, it is important to locate them within the social and material spaces they occupy, in order for these constraints and their effects to become apparent. The following turns to a model of identity which allows for exploration of these issues.

3.3 Identity

The literature explored in Chapter Two suggested that there has been a consistent emphasis on individuals to change their behaviour in order to limit the negative environmental effects of increases in the use of private transport. More recent initiatives, such as the DfT's Smarter Choices programme, have recognised the importance of physical infrastructure in facilitating people changing to more environmentally friendly travel behaviour options. Market segmentation techniques have gone some way to identifying sections of the population who are likely to be susceptible to different policy initiatives. However, there is a vast and complex range of factors which influence travel behaviour, and these differ between individuals. The aim of my research is to follow on from this by exploring the factors which shape travel behaviour, asking particularly what the role

of identity is in influencing behaviour - what makes people with seemingly similar situations act in different ways? In order to do this, there is a need to identify a way of conceptualising identity which allows for and understanding of the individual as unique, and situated within their material and social environment. The rest of Chapter Three is devoted to the development of such a conceptualisation of identity.

Identity has been theorised in many different ways in different disciplines. The approach of this thesis is a realist, social psychological approach to identity, one which focuses on the individual rather than their membership to a specific group, or a social role or category. This section will situate my approach to identity within the development of identity theory, and will explore potentially useful ways to approach the study of identity in relation to travel behaviour. The final section will outline Harré's standard model of identity in some detail, detailing how it will be used to examine the role that identity plays in travel behaviour.

3.3.1 Ontology

Identity theory has changed over time. An essentialist approach to identity puts forward 'the notion that individuals or groups have an immutable and discoverable "essence" – a basic, unvariable, and presocial nature' (Moya, 2000, p4). This approach led to a 'tendency to posit one aspect of identity (say, gender) as the sole cause or determinant constituting the social meanings of an individual's experience' (Moya, 2000, p5). Much research into identity has taken on this concept, with much practical identity research exploring the role of one defining aspect of identity, such as gender, age, or race, in the way that people live or behave.

Segmentation is underpinned by essentialist assumptions of identity. Whilst the use of market segmentation techniques contains a recognition by policy makers that people are not just copies of the 'rational man' model of economic behaviour, but are individuals with individual influences, values, and desires, this differentiation is generally either on the basis of demographics, behaviour or attitudes.

Research using segmentation techniques is fundamentally based on an essentialist position, since there is always an attempt to distil a population's identity down to a manageable number of 'types.' More recent attempts, such as Anable's (2005), to increase the complexity of the segments by

using more than demographic characteristics is a positive step towards the recognition of the complexities of identity, although are still essentialist in nature. Although apparently dominant in policy making around environmentally significant behaviour, such essentialist theories, whatever their level of complexity, have been challenged in a fundamental way.

Social constructionist ideas of identity are a reaction against the essentialist tradition of believing identity to be a fundamentally discoverable, natural, unchanging essence. Key theorists of the era of social models of identity include Freud, Marx and Mead who 'recognised the powerful influence of others on our sense of identity' (Kearney, 2003, p36), and saw identity not as having an inherent natural existence, but as constructed through social interaction. Social constructionism furthers the understanding of identity as fluid, dynamic and changeable, in contrast to the fixed essence understood in essentialist thought. This recognition of fluidity is a good tool for understanding how identity influences behaviour, and how both the identity and behaviour change over time.

Jenkins (2008, p5) suggests that identity is not a thing but rather a process of identification, and, as such, it is something that one does rather than has. This process of identification matters because 'it is the basic cognitive mechanism that humans use to sort themselves and their fellows' (Jenkins, 2008, p5).

Following on from this, it would make sense if identity were something constructed through interaction and situation dependent. However, this position has been taken to extremes to argue 'that we do not carry self-knowledge around in our heads and cognitive representations at all, but that we construct disposable selves through talk' (Hogg et al, 2002, p124).

The idea that we construct a disposable self through conversation is a postmodern take on identity, which takes a 'creative, and constantly changing view of self as we respond to rapid social and technological changes' (Kearney, 2003, p54).

In response to previous social and essentialist approaches to identity, the postmodernist approach suggests that

'social and cultural identities... [are] fictitious because the selves they claim to designate cannot be pinned down, fixed or definitively identified. Moreover, identities are not simply fictitious; they are dangerously mystifying. They are mystifying precisely because they

treat fictions as facts and cover the fissures, contradictions, and differences internal to the social construct we call a “self”

(Moya, 2000, p6).

Moya (2000, p12) argues that experience suggests that ‘humans can develop reliable knowledge about their world and how and where they fit into it’. Consequently, other theorists have endeavoured to develop coherent accounts of identity which sit between the fixedness of the essentialist position and the fluidity which is the logical conclusion of the postmodernist approach. Such accounts recognise the enduring elements of identity within the wider reality of complexity. ‘Identities are real in the sense of being lived, of having real effects, and of constituting key features of our shared reality’ (Alcoff, 2000, p318).

Harré (1976) writes of key concepts of realism being that there are entities, which can be either present or absent, and which can be referred to using words which have shared understandings and meanings (p90). Some of these entities may exist – a state proven by demonstration – in that they are present, and we can point to them. Others are ‘candidates for reality’ (p91) – in that we can talk of them, and may at a later point ‘prove’ their existence by being able to point at or demonstrate them in some way. The status of such entities can change over time.

Similarly, Harré (1976, p104) puts forward the realist notion that there are three types of ‘individuals’ that exist, and can be both pointed to and referred to: (1) what he describes as ‘Parmenidean’ individuals (ibid, p105), which are unchanging, such as diamonds; (2) ‘Heraclitean’ individuals, which are ephemeral, and exist only temporarily, such as lightening (ibid, p105); and (3) ‘Aristotelian’ individuals. which have the potential to change (ibid, p107). Individual people are Aristotelian individuals; while characteristics may change considerably throughout their lives, their identity endures, and a sense of continuity is preserved through the inhabitation of a single body throughout their lives.

An alternative way of approaching this research question would have been to explore the nature of ‘mobility identities,’ looking specifically at those aspects of identity that relate to travel behaviour. However, this would have risked categorisation in a way similar to segmentation, with a focus on people’s choice of travel mode, and whether they felt they could have associated with stereotypes of that mode. Instead, this realist

conceptualisation of individuals having a real, enduring identity, and yet with the potential to change, allows individuals to be situated within their material and social contexts while retaining their individuality. It thus provides a useful framework for exploring the range of factors which shape travel decisions for individuals within the contexts of which they live.

3.3.2 The development of a specific theoretical approach

Harré presents a useable, workable model of realist identity taken from the way people talk about themselves in everyday speech, using shared understandings and meanings. This he terms his 'standard model' of identity, and it provides a solid framework for structuring the exploration of the role that identity plays in influencing travel behaviour.

This model identifies 'person' and 'self' as the most relevant terms, with 'person' as 'the most stable and univocal in everyday use' (Harré, 2001, p60).

'English speakers of our time seem to me to operate with a standard model, in which "persons" serves as the word for the basic particulars of the human world, each of which has or seems to have attributes and components referred to by the multivocal word "self"

(Harré, 1998, p60).

Harré expressed this 'standard model' in a 'little formula':

P{S1,S2,S3}

P here symbolises a person, with Self 1, Self 2 and Self 3 as 'contexts or component parts of that person.'

- **Self 1** is 'used for the singularity of an embodied point of view' (Harré, 2001, p60). It is 'expressed in the first person pronouns' (ibid, 1998, p53).
- **Self 2** is the reflection on oneself as a person, 'a complicated mesh of very different attributes, some occurrent, such as images, feelings and private dialogues, but most are disposition, like skills, capacities, and powers' (Harré, 2001, p61).
- **Self 3** is 'used to refer to the way that certain aspects of a person's actual or attributed Self 2 are manifested to others in the course of some life episode (Harré, 2001, p61).

Relatively little empirical research has been done using Harré's model, and what research has been done is within a limited field. Sabat (2002, 2005, 2006) and Sabat and Harré (1992) have applied this standard model to the study of the expression of Selfhood in people with Alzheimer's Disease. This research illustrates how the three selves can be conceptually separated, and reveals important understandings of the selves, and the ways in which they interact and are expressed, which provide a valuable framework for the study of identity in the context of travel behaviour.

Sabat and Harré's research has shown that Self 1 is consistent, right to the very end of a person's life, whereas Selves 2 and 3 are changeable, and may be eroded altogether. This illustrates the changeable state of Self 2 – physical and mental attributes and beliefs about those attributes, and Self 3 – different social personae and behaviour patterns, which require the cooperation of others (Sabat, 2002, p27). Self 3 personae 'are extremely vulnerable in ways that Self 1 and aspects of Self 2 are not' due to the fact that the cooperation of others is required for their construction (ibid). These more ephemeral aspects of identity, whilst changeable, are linked to the enduring Self 1 and the more stable aspects of Self 2.

Self 3, or social identity, can be 'spoiled' (Goffman, 2001 [1959]) when others do not cooperate in its production. Sabat (2006, p16) describes the case of Rose, who, diagnosed with Mild Cognitive Impairment (MCI), 'withdrew from social activities, anticipating (rightly or wrongly) a negative reaction from friends and family if they knew of her diagnosis.' Rose is here contributing to others not being able to cooperate with the construction of her Self 3 personae by not seeing people, but Sabat suggests that this is not completely unreasonable given how some others view people with some form of dementia (ibid, p17). Sabat suggests that:

'the person diagnosed with MCI is now seen as "the mildly defective patient" who may become more and more of a "burdensome patient" in time. It is precisely in this way that the person's social identity may be spoiled, for the person is then positioned in malignant, or negative, ways by others.'

Harré's standard model can be understood in conjunction with positioning theory. Positioning theory is 'a social constructionist fusion of anthropology, sociology and psychology' (Boxer, 2003, p5). Positioning is the constantly shifting act of placing oneself within a social situation and ascribing a place for others. It is the dynamic replacement of the more static 'role' within

social psychological identity theory (see, for example, Stets and Biga, 2003; Mannetti et al, 2004). Positioning is Self 3 work; presenting aspects of Self 2 in order to position oneself in relation to one's surroundings and other people. What one positions oneself in relation to is determined by the relationship between Self 1 and the world. Positioning is

'the discursive construction of personal stories that make a person's actions intelligible and relatively determinate as social acts and within which the members of the conversation have specific locations'

Harré and van Langenhove (1991, p395).

The process of identity creation has been seen as 'construct[ing] a personal narrative' for oneself (Giddens, 1991). This is echoed in Kearney's (2003) idea of 'storied identities' 'by which we make sense of our past life and the present by constantly updating our narratives to produce coherent narratives of self' (2003, p54).

This social psychological view takes from the other approaches and 'examines the notion of how collective memories are constructed, how predominant narratives gain a purchase on the individual sense of self' (Kearney, 2003, p54). Recent work in social psychology has added 'the recognition of the central place of self-narrative in the process of identity formation. Through its emphasis on memory, there is a recognition of a continuous, yet changing sense of self' (ibid, p52).

Within social constructionist accounts, identity is to some extent created through social interaction. Sabat and Harré (1992, p445) describe how, from the constructionist point of view, 'selfhood is manifested in various discursive practices such as telling autobiographical stories, taking on the responsibility for one's own actions'.

'Position' is dynamic, influenced directly by the situation, recreated in every new situation, and meaning different things to different people (Davies and Harré, 1990). If the social world is created through conversation (Harré and van Langenhove, 1991), and the individual emerges through social interaction (Davies and Harré, 1990), this means that the concept of 'who one is' is constantly shifting (Davies and Harré, 1990); one has a continuous personal identity, in the sense of Self 1, but a dynamic personal diversity and multiplicity of selves (Selves 2 and 3).

In saying that an individual emerges through social interaction, Harré does not relinquish his realist perspective (Boxer, 2003, p70). As Boxer (p6) explains,

‘positioning theory is about personal construction of the self. Personal construction of the self implies agency and agency implies realism. That is, a level of consciousness regarding action.’

Davies and Harré (1990) make an important point: that one’s beliefs are not a unified whole, that aspects of Self 2 and Self 3 can shift throughout conversations, and therefore it is likely that one will have or express contradictory beliefs or selves at any point.

Having described the main components of Harré’s standard model of identity, it is useful to detail how these can be used to explore the role of identity in travel behaviour. I have slightly modified the language to make the terminology more descriptive and intuitively meaningful. Throughout this thesis, I will refer to Self 1 as ‘physical embodiment’, Self 2 as the ‘internal self’, and Self 3 as the ‘external self’. This does not change the meaning of the selves as Harré referred to them, but rather makes the words themselves more meaningful when read in context.

- **Self 1 – physical embodiment**

Harré’s Self 1 is ‘the singularity of an embodied point of view’ (Harré, 2001, p60). This is the self of ‘myself’, the point of view from which the individual perceives the social world. This is the self of *physical embodiment*, used in everyday conversation to distinguish the individual from other beings, and acknowledges that the individual is one person, capable of being only in one place at a time. It also emphasises the continuity of the selves, rather than them only being in existence when created through conversation. It is important to emphasise that this ‘personal identity’ is not the personal identity generally understood in the fields of sociology or psychology, but rather the simple fact of being a unique, independent, embodied individual in a single place.

- **Self 2 – the internal self**

Self 2 is used by Harré to refer to ‘the totality of attributes of [a person], including [the person’s] beliefs about those attributes’ (Harré, 2001, p61). I will refer to this self as the *internal self*, as distinguishable from an external self that is presented to the world. This internal self comprises a variety of

aspects. Harré describes these as both 'occurent', being 'images, feelings and private dialogues' and 'dispositional' – 'skills, capacities and powers' (2001, p61). In order for the concept of an internal self to be useful for analysis, it is necessary to be clearer about the aspects it contains. This can be done by combining Harré's ideas with the notion of Rorty and Wong's (1993, p19) traits.

The internal self, then, is comprised of a series of aspects, beginning with *physical traits*. A person's height, hair colour, and any physical disabilities are an inherent part of their identity, and shape other aspects of their identity. Physical traits, such as hair colour, are often imbued with assumed characteristics, and the interplay between social assumptions and individual private identities, for example when a person changes their hair colour, illustrates one level of the interrelationships between the internal and external selves.

Contained within the internal self are also a series of temperamental traits, a person's *disposition*. This is their nature, their tendency towards a particular way of being, for example kindness, trust, aggression. Disposition is partially shaped by socialisation, although the extent of this social influence cannot be quantified. Again, elements of disposition are associated with certain behaviours, and this may shape the personal experience of these dispositions.

Harré describes Self 2 as containing 'attributes', and it is useful to think of these partially in terms of *skills*, such as being able to drive, for example, or knowledge, or education. These are gained socially, but are part of the internal self, rather than the external for the most part, until they are displayed in some social situation. They often remain things that people *can do*, rather than *what they do*.

Harré's *occurent attributes* are feelings, experiences, and memories, less tangible, perhaps, than physical traits or attributes, but no less real. The store of memories and experiences is increased over time with social experience, and is influenced by the interaction between the internal self and the social world. Experiences happen, and memories of those experiences are passed through the lens of the internal self. Memories can be forgotten, or remembered inaccurately, but at the same time shape

identity. Feelings are more fleeting, and are influenced by a combination of disposition and social experience.

More illustrative of the connection between the internal self and the social world are *social roles* and the membership of *social groups*. A person is a member of several social groups by virtue of some of their internal characteristics, such as gender, and ethnicity. Individuals also take on a variety of social roles. These roles, such as 'mother', or 'business man' have meaning outside of the individual; a shared set of social assumptions that exist within a society, although they may be different between societies. These social roles and groups exist outside the individual, but once an individual becomes labelled as being part of that group, or having taken on that role, the label is internalised, along with the corresponding set of expectations and assumptions. These may not be acted upon, but form part of the internal self and the way a person assesses themselves, as well as the way that they position themselves within the social world. Conflict can occur when, as often happens, the expectations of competing groups and roles are internalised. The outcomes of the conflicts, and the reasoning by which they are solved, can reveal important aspects of motivation and decision making.

Finally within the internal self are *values*. These values can be strongly linked to the assumptions within various social roles or groups, or can stem from a person's disposition or occurrent attributes. Values have a strong influence on behaviour, but different values may be prioritised in different situations. Dietz et al (2005) have described the uses of values in everyday life to refer to (1) what something is worth, (2) opinions about that worth, and (3) moral principles. It is primarily the idea of values as moral principles that is discussed here.

- **Self 3 – the external self**

Harré describes Self 3 as 'the way that certain aspects of a person's actual or attributed Self 2 are manifested to others in the course of some life episode' (2001, p61). Self 3 is 'expressed in social action, in the personality and character I display in my dealings with real and imagined others' (1998, p53). Self 3 is that which is presented in Goffman's *Presentation of the self in everyday life* (2001[1959]). Self 3 then, is the *external self*, the self that is displayed to others. This constantly shifts and alters according to which

aspects of the internal self are displayed in any given interaction, and, as such, is greatly influenced by physical and social situations, as well as by aspects of the internal self. It is useful to refer to the external self in the context of *positioning*.

Positioning illustrates an aspect of the dialectic relationship between the internal and external selves, as well as between the selves and the external social world. Aspects of the internal self are presented to others as the external self; on the basis of these presentations, the person is positioned, and positions themselves, within the external social world which contains them and others. This positioning in turn affects the way they themselves see their internal self, which is shaped again in accordance with their expectations. The internal and external selves and the social world are inextricably linked.

Thus, I conceptualise identity as including an individual's physical embodiment, as well as internal and external selves each with a series of elements including changing social circumstances, values, social roles, social groups, previous experiences, and memories.

Analytically the selves are distinct, but also interlinked, and this conceptual framework allows for the enduring yet fluctuating nature of identity to be explored along with the interactions between the selves and between the individual and the social world.

The aim of this research is to explore how identity, as defined above, shapes travel behaviour at an individual level, with a particular interest in the role of environmental values given their significance within environmental behaviour change policy. Thus, the research question is:

How does identity influence travel behaviour?

What is needed is a way of exploring the motivations, situations and values of individuals in relation to their travel choices, in order to adequately address the complexities that are inherent in those choices for individuals. Harré's model of identity is a realist account of a social constructionist version of identity theory, drawn from the way people refer to themselves in everyday speech, and with minor modifications outlined above, can provide a useful way to explore and address the complexities of the relationship between identity and travel choices. This mirrors the realist approach this thesis is taking to the notion of structure and agency, that the relationship

between the two is dialectical, and that individuals create structures, but they do so within structures that are also created, and they learn strategies for dealing with these structures and the opportunities and constraints they pose.

Table 3.1 describes the language and conceptual framework that will be used in this thesis, and sets out a series of questions that each aspect of the identity framework raises in relation to travel behaviour.

Table 3.1: Questions around travel behaviour raised through identity framework		
	Aspect	Questions
Self 2: Internal self	Physical traits	<ul style="list-style-type: none"> • What physical traits do people have that may affect their travel behaviour?
	Attitudes	<ul style="list-style-type: none"> • What attitudes do people have around travel?
	Memories	<ul style="list-style-type: none"> • What good/bad memories do people have of transport modes? • What associations do they have with travel?
	Experiences	<ul style="list-style-type: none"> • What experiences have people had of different types of travel? • How have these experiences shaped their travel behaviour?
	Values	<ul style="list-style-type: none"> • What do people value in relation to transport? • What environmental values do people hold, both in relation to transport and otherwise? • How do these values influence travel behaviour?
	Skills	<ul style="list-style-type: none"> • What skills do people possess/see as important in relation to transport? • How do these skills (or lack of them) shape travel behaviour?
	Social roles	<ul style="list-style-type: none"> • What social roles do people possess? • How do these roles influence their travel behaviour?
	Social groups	<ul style="list-style-type: none"> • What social groups are people part of? • What influence do these groups have on their travel behaviour?
Self 3: external self	Positioning	<ul style="list-style-type: none"> • How do people see themselves in relation to transport? Do they identify with being a user of a particular mode? Why, or why not? • How do people present themselves to other people in relation to transport? • How does other people's view of them shape people's travel behaviour?

3.4 Conclusions

Chapter Two acknowledged the complexity of the situation of the relationship between mobility and identity, and raised the question of how to deal with value conflicts on both an individual and global level. It also acknowledged the 'system of automobility', and the assumption of car ownership often inherent in both physical and social structures. Research into the gap between environmental values and actions has begun to identify the complexity of barriers and motivations to changing mobility behaviour, and to tentatively suggest some ways of tackling these through transport policy. Alongside this, research using segmentation techniques is developing the idea of looking at a 'whole' person, which is a positive step towards the recognition of the complexity of factors that goes into making mobility decisions for individuals. However, at present this approach remains relatively simplistic in its assumptions.

These developments raise the importance of tackling the complexity of identity in travel behaviour research – not just in relation to environmental values, and not through simplistic categorisation of people's characteristics. For the complexity of this relationship between identity and mobility to be tackled in a coherent manner, identity must be understood as 'real.' Essentialist conceptions of identity are unhelpful in this context, unable to separate complexity of layers of identity. Equally, post modern accounts of identity allow for a shifting, changeable complex model of identity, but the mutability is infinite, and identities are seen as being formed anew in each social interaction. This does not allow for the development of identity over time, or for a continuous thread of experiences to be taken into consideration.

A more helpful model is a realist account of social constructionism, which allows for the changeable nature of identity, forming and shifting over time as people take on board new experiences and changes in life, but also having an enduring quality of belonging to a consistent person, developments building on an existing identity rather than being invented newly with social situations. This model allows for the exploration of the complex relationship between identity and travel behaviour, including the way in which physical and social conditions impact on individuals as they

make travel choices, and the way that different aspects of experience, values and feelings go into shaping travel behaviour. This, therefore is the broad conception of identity that will be used in this research.

The development of the specific conceptual framework for this research is intertwined closely with the theoretical developments made through the trial of a pilot study. Chapter Four contains a description of the pilot study, and detailed exploration of the theoretical developments leading to the conceptual framework for the research.

4. Methodology

4.1 Introduction

Chapter Three raised issues around research into identity, and introduced Harré's standard model of identity. This was then modified to develop the conceptualisation of identity used in this research. Chapter Four details the work of the pilot study, and issues around further development of the research methodology. It describes the methods that were used, together with reflecting on the appropriateness of these to the aims of the research.

4.2 The pilot study

The pilot study had two aims: (1) to explore the concept of multiple identities and its applicability to research into travel behaviour; and (2) to explore the use of two different methods for this research. The pilot study had two stages. In the first stage, three participants were asked to keep a travel diary, which was then used as the basis for discussion in an in-depth interview. In the second stage, on the basis of the outcomes of the first stage, two further participants were asked to take photographs on a journey, which then formed the basis for discussion in an interview. The five participants were recruited through convenience sampling within the department where this research was carried out, because it was necessary to use an existing trusting relationship rather than spending time building a working relationship with new people. This section describes the framework used for the pilot research, including its use in previous research. It then moves on to discuss the usefulness of both travel diaries and photographs in task-based interviews, and finally it reflects on the pilot interviews themselves, and introduces the main research.

4.2.1 Framework

The pilot study was completed before the development of the theoretical framework to include Harré's standard model of identity, but it is worth including in detail for three reasons: (1) because of the influence it had on the decision to base the framework around Harré's theory; (2) because of the influence it had on the design of the main research itself; and (3) because of the issues it raised around both the use of travel diaries and around researching identity.

As a framework for the exploration of identity for the pilot study, I used Jones and McEwen's (2000) model of multiple dimensions of identity, shown in Figure 4.1. This model was developed as a visual conceptualisation of multiple dimensions of identity found in a study of women college students. The study was designed to explore the women's understandings of their own experiences of identity, and the researchers conducted three in-depth, open ended interviews with ten women, the first being broad in scope, and subsequent interviews picking up on themes from the previous one. The central purpose of this style of interview was

'to engage in dialogue with participants to elicit descriptions and perceptions of themselves and their understandings of identity development'

(Jones and McEwen, 2000, p407).

A core category was developed from the empirical material to 'tell the central story of all participants as a group' (ibid, p408). This was the role of contextual influences on the construction of identity, and the notion of identity having multiple intersecting dimensions.

The model includes 'outside identities' such as gender, race, culture and religion encircling a central core, which contains 'a core sense of self', personal attributes, personal characteristics and personal identity (ibid, p408).

'The importance, or relative salience, of these identity dimensions is indicated by the dots located on each of the identity dimension circles. The location of the dot and its proximity to the core represents the particular salience of that identity dimension to the individual at that time'

(Jones and McEwan, 2000, p410).

I chose this model as the basis for the initial pilot study for a number of reasons. It was developed by Jones and McEwen through grounded theory from a qualitative exploration of participants' own understandings of their identity experiences, and therefore reflects the priority of this research of individuals' explorations of their own identities. Secondly, while Jones and McEwan's research was more general in nature, the use of this model of multiple dimensions of identity lends itself to the exploration of the development of identity around the specific issue of environmental values

and travel behaviour, in particular the exploration of these issues by the participants themselves.

It was explained to each of the participants in my pilot study that the use of the model was exploratory; the study was not designed to 'test' the model as such, but rather to explore the underlying principles on which it is based to ascertain whether it is a useful way to look at identity in the context of travel behaviour and environmental values.

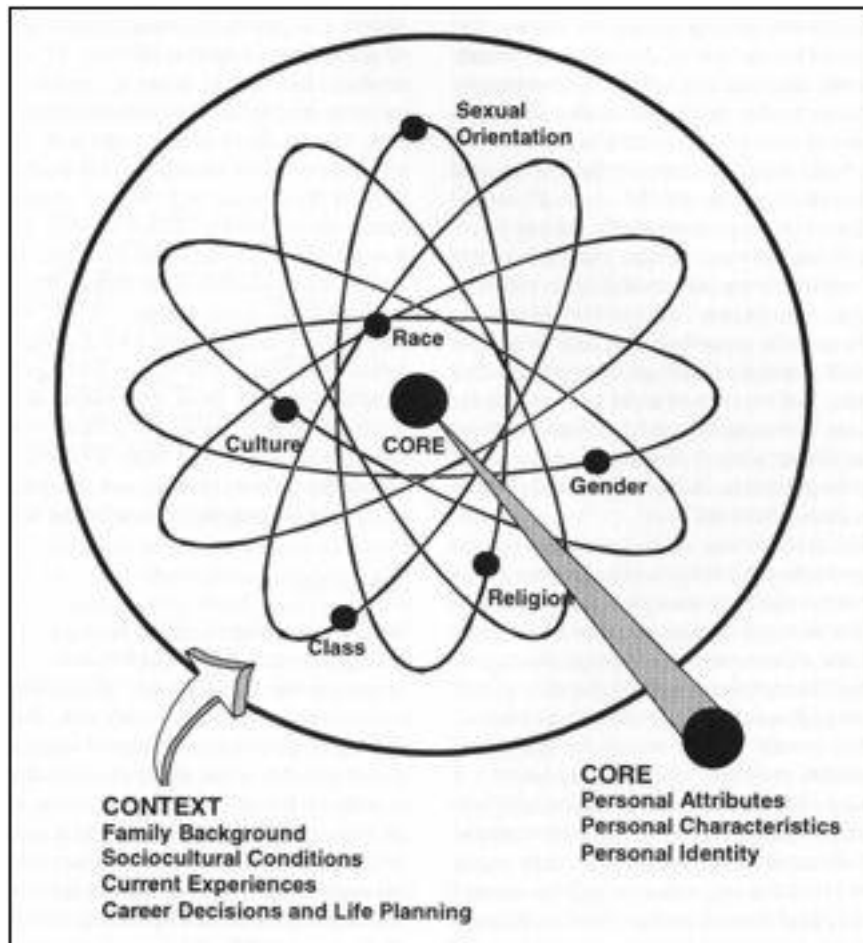


Figure 4.1 A conceptual model of multiple dimensions of identity. (Jones and McEwan, 2000, p409)

4.2.2 The use of travel diaries in the pilot study

The three participants in the first stage of the pilot were given a small notebook to record details of their journeys in the week preceding the interview. This was done partly to give the participants a reason to think in advance about the journeys they were making, and partly to provide a discussion point for the start of the interviews, so that they focused around real life examples for each of the participants.

Travel diaries have been used in transport research since the late 1970s (Stopher and Greaves, 2007, p370), and have undergone many changes since then. There are two main forms of diary surveys: trip diaries and activity diaries. Trip diaries focus on capturing information about individual journeys taken during the research period, with respondents being asked to record the time, mode of transport used, and destination of each trip they make during the data collection period. This method is more common in travel behaviour research.

Activity diaries date from a modification of the trip diary in 1992 by Stopher (Stopher and Greaves, 2007, p370). Instead of focusing on the trips made, respondents are asked to detail each activity they undertake, with travelling being classed as another activity. They go some way to placing journeys made within their social context of other activities, and also have an inbuilt check against under reporting of trips, given that they detail activities taking place in every time slot within a day. Time based diaries are similar, but rather than focusing on activities, they take into account that everyone has 24 hours each day, and assess how people spend that time, and what proportion of it is spent travelling and how (Ellegård, 1999, p170). Such approaches capture *how* people travel, but they do not explore *why* people travel, or how the individual activities are related to each other. Place based diaries are a more recent hybrid between trip and activity diaries, developed in the 1990s, and ask respondents to record where they went next, and then how they travelled there, the emphasis being on the place, rather than the activity.

Ellegård (1999, p170) suggests the use of open diaries which, rather than asking respondents to fill in what they did in each ten minute time slot, ask instead for them to write down each activity, and accompanying information about how long it took for example, which gives a better picture of how activities are related to each other. This mirrors the approach taken by Vilhelmson (1999), who sees a need for a 'human activity approach' in transport research, to capture the sequence of activities that makes up everyday life. One criticism of this approach is that it contains an inherent assumption that travel is a demand derived simply from the need to get from one place to another to accomplish a specific task. As such, it cannot assess the reasons behind those journeys, nor the fact that some of them

may be undertaken for leisure, nor the alternatives to those journeys that people may have chosen had they had the opportunity.

Harvey (2003) advocates the use of time-space diaries in travel research, which situate trips in the context in which they take place, detail location information for activities, and also capture all activities taking place in a given time frame. This allows broader data to be collected.

Most travel diaries used in research take place over the course of one day, or at most two days. Axhausen et al (2002) suggest the inadequacy of the data generated by this approach, given the new emphasis in policy making on influencing travel behaviour over more than one day, for example the use of peak pricing leading to the altering of journeys to accomplish several tasks in one trip (p95). The UK National Travel Survey (Department for Transport, 2008), which has taken place continuously since 1988, is based around respondents filling in one week travel diaries, but Axhausen et al (2002, p96) suggest that even this period of time only allows the study of shorter rhythms of travel behaviour patterns.

They suggest, therefore, that monitoring travel behaviour over a longer period may be useful, and give the example of the Uppsala Travel Survey of 1971, the only example prior to their own work of a travel survey of longer duration.

The travel diaries used in my pilot study were trip based. Respondents were given a blank notebook and asked to detail all trips made during a one week period, but were not given specific instructions on the kinds of details to give, other than to include some thoughts on each of the journeys that they made. Unlike a travel survey, consistent reporting was not required; the research was not aiming to collect specific trip data from each of the respondents, but rather to use the diaries as the basis for discussion in an in-depth interview. As such, it was decided that a complex form to fill in, or asking respondents for specific details, would provide unnecessary detail and perhaps discourage respondents from also writing their thoughts about their journeys.

As a result, each of the diaries varied in tone. The first participant's diary was chatty in nature, not giving details of specific timings or lengths of journeys, or even specific destinations, but instead talking about the reason

for journeys, and the purpose they accomplished. For example, the entry for the Sunday in the week of the research reads:

'Walked in to [workplace] – considered getting bus as had laptop with me (heavy) but as it is only every half hour and there are no times on bus stops didn't bother – if had seen one would have got it. Also walked back. Went (walked!) to local pub in evening – literally up the road. As I'm not drinking at the moment this creates the opportunity to drive to different and harder to get to places, but we haven't.'

The second respondent in the pilot was much more specific about timing, duration and destination of journeys, as well as purpose, but the entries were much shorter and with more emphasis on factual detail of journeys rather than thoughts about them, although these were sometimes included.

For example:

'9am home – [workplace], walked in, cold weather but nice walk in morning

10am [workplace] – [other building] only 2 min walk, but annoying b/c have to avoid cars in car park

1pm [workplace] – union for lunch, in hurry, didn't want to walk further

4pm [workplace] – [other building] – seminar

6pm [other building] – pub

8pm pub – [restaurant] (walked, needed food)

10pm walked home – nearby only 10 min walk'

The third participant in the pilot study completed a diary that varied enormously in length and detail. At the beginning of the week, a very in-depth account of a train journey was given:

'4pm, got the train to the station. This was on time and got me to the station within 10 mins. Had preordered train tickets – queue for the ticket office was huge, at least 20 people. Much smaller queue for the 'fast ticket' machine, but girl in front of me had her card swallowed. This took about 5 mins to sort out which could have caused serious problems if I was running late. Took me a while to find my train on the notice board- had to see WAP to find my exact time of departure. Was a queue for the Midland Mainline ticket office. Train was just a couple of minutes late and although it was quite full I managed to get a table seat.... Big guy sitting beside me had me squeezed against the window – not comfortable!'

This account continued in a similarly detailed vein for several more pages, perhaps indicative of the length of the train journey. However, towards the end of the week, the third participant's diary entries became very short:

'10am walk into office

8pm walk home'

The final day's entry simply read 'pretty much the same on Wednesday'. This reflects one of the disadvantages of the use of diaries in a research setting: fatigue. However, as diaries were used only as prompts for discussion in the interviews, quality was not an issue.

The German Mobidrive study (Axhausen et al, 2002) piloted the use of six week travel diaries, with the aim of recording habitual travel behaviour patterns over a longer period than traditional diaries in order to observe 'the rhythms of daily life and, by implication, [...] the process by which these are produced through scheduling, pre-commitment or chance' (ibid, p98). Contrary to the perception that non response rates for diary surveys have risen in recent years (Stopher and Greaves, 2007), the Mobidrive study found no significant fatigue in response rates of participants. Axhausen et al (2007) believe this signifies the importance of the relationship between the researchers and participants. In the Mobdrive study, and the more recent 2003 Thurgau study, participants were recruited by letter, contacted by telephone, visited by researchers, and then sent a diary to complete each week, with regular calls from the researchers. This ensured commitment to the project and a very low drop out rate.

My research could have been approached differently by having participants fill in activity diaries, rather than trip diaries. The advantage here would have been to situate the journeys in the context of the participants' other social activities, rather than viewing travel as an end in itself. It would also have given a more complete picture of the participants' activities during the data collection period, and captured any trips that were potentially missing from the trip diary. However, while this may have been a more thorough approach to this aspect of the research, there are questions about whether it would have been any more appropriate to the overall research aim. The aim of this research is to explore the relationship between travel behaviour and environmental values, and the role that identity plays in that relationship. The approach chosen is qualitative in nature, and the use of detailed activity diaries would have produced data irrelevant to the study whilst imposing an unnecessary burden on the participants filling in the diaries.

The usefulness of the diaries in the pilot varied. Each participant in the first stage was asked at the end of the interview for their comments about their

involvement in the research process itself. All three participants said they had found it difficult to remember to fill in the diary for each journey, although all had done so. On reflection, as the diaries were intended as a prompt for discussion during the interviews, I felt that perhaps a more interesting, less arduous method would work just as well for this, and promote a more positive experience for the participants.

Therefore, on reflection, after the completion of the first stage of the pilot study, it was considered that travel diaries were not appropriate to provide the way in to the exploratory nature of the interviews themselves, and that something more focused on making the participants think about how they felt about travel and the decisions they made, rather than simply recording specific details of their trips, was needed. The purpose of this stage in the research process was to encourage participants to think in advance about their travel behaviour, and to enable them to share some of their experiences with the researcher in the interview, in order to allow a shared understanding to develop.

4.2.3 The use of self directed photography in the pilot study

For the final two pilot interviews I gave participants disposable cameras and asked them to take photographs on one journey in the week preceding the interview. As with the diaries, the aim was to start the process of thinking about travel, and, more importantly, to provide the basis for discussion in the interviews, enabling people to share some of their experiences with me. For this, the use of self directed photography, a method of photo elicitation, worked well.

Photo elicitation is the process whereby photographs are used to stimulate or guide an interview. The photographs may be produced by the researcher or the participant (Moore et al, 2008, p51). The use of photographs in interviews ranges from the most scientific methods, generally inventories of objects, people or artifacts, through pictures of events that are part of the collective or institutional past, to 'intimate dimensions of the social,' including photographs of family, social groups, or participants' own bodies (Harper, 2002, p13). Self directed photography is a method of photo elicitation where photographs used in interviews have been taken by the participants rather than being provided by the researcher (Moore et al, 2008, p51). Much of the research using self directed photography has been

with young people, and the method has been used as a way of restructuring the power relationships within research, and giving a voice to young people who would not usually have a platform to express themselves in this way.

Photographic methods were first used by Collier in 1957, who proposed the use of photo interviewing as a solution to a practical problem of how to agree categories of the quality of social housing in a research area (Harper, 2002, p14). Collier later expanded the use of photographs to research around how families adapted to residence among ethnically different people, and new forms of work in urban factories, completing interviews with the same people both with and without photographs, and finding that the use of photographs in interviews sharpened people's memories and reduced misunderstandings of meaning between the participant and researcher (Harper, 2002, p14).

Since then, photographic methods have been used in a number of areas of research. The use of visual methods in the social sciences has largely comprised local, small scale projects, with participants as co-collaborators in the production of information (Packard, 2008, p64). Harper (2002, p16) identifies four specific areas in which photographic methods have been used: (1) social class, organisation and family, including the use of existing family photographs to generate discussion; (2) community and historical ethnography; (3) identity, in particular identities around young people, drug addiction, homelessness, ethnically different immigrants, and work worlds; and (4) culture and cultural studies, including the interpretation of signs.

Identity research using visual methods has primarily centred around one specific identity, such as with young people, street children, or homeless people (Harper, 2002, p18). It has been used to explore, for example, identities of homeless men (Packard, 2008) and street children in Peru (Joanou, 2009). In each of these cases, the focus has been on one particular aspect of identity. The exploration of identity in my research is different, as it involves an exploration of the many facets of identity, in relation to travel behaviour and environmental values, rather than one particular aspect of identity.

The use of self directed photography in qualitative research can demonstrate 'the value of multiple viewpoints and perspectives' (Dodman,

2003, p293) of the research participants, and appeared to have potential as an productive, positive way to provide an introduction to the interviews. It does not appear that self directed photography has been used to research identity and travel behaviour in this way before, and the photographs were not intended to be analysed as stand alone data. Instead, I chose to let each participant explain the contents and significance of their photographs to me in turn during the interview, which started the interview with the participant being given a positive element of control over the situation (Dodman, 2003, p293). The photographs worked well, the participants enjoyed both taking them and explaining them during the interview, and I decided that they would form part of the main research.

Had there been an intention to analyse the data from either the photographs or the diaries by the researcher outside of the interview setting, activity diaries, or perhaps time use diaries, may perhaps have provided a more useful tool than photographs. However, this was not the case in this research.

4.2.4 The pilot interviews

Each of the five pilot interview began with a discussion of the incidents recorded in the travel diary or photographs, drawing out key themes and asking questions about opinions expressed by the participants. Following this, I explained the diagram, and talked through the concept of different identity dimensions being closer to or further from the central core, and asked each person to explore and identify their own identity dimensions. The first participant was asked to identify on the diagram where the different aspects of her identity should go. As she did this, we talked about the possibility that there may be a health-related identity dimension for her, based on two entries from her diary where she stated that she felt 'lazy' when she did not walk. The participant then made a connection between her health and the health of the planet, saying,

'So you've got personal risk, walk to keep my legs going, want to keep a fit person, and also that it is damaging to other people's health and my health and the planet by using fossil fuels.'

I suggested that this might perhaps form part of an environmental and social loop on the diagram, but the participant said it would perhaps be better, and more controversial, to put it under religion, 'because, as a pagan, I believe the earth is sacred'. She went on to connect the idea of

driving less with, 'bigger ideas of... eating organic food and producing waste generally.'

This exchange demonstrates how the diagram can be a useful way of eliciting thought about different identity dimensions. It also shows both the value and the danger of suggesting specific categories based on a short travel diary – this participant was able to disagree with my suggested categorisation and use it to prompt her own, whereas others may not have the confidence to disagree. It also demonstrates the value of not using the diaries or photographs as standalone data, but rather as a tool for eliciting discussion that leads to a negotiated interpretation. In addition, the categories given by the diagram and taken by the participant are relatively static, and to a large extent cannot deal with the fluidity of the concepts discussed during the interview, such as what the participant in this case described as the 'bigger ideas' of organic and local food.

Whilst the diagram was useful in the first pilot interview to prompt discussion about different dimensions of identity in relation to transport choice, three issues emerged from the pilot interviews regarding the use of the diagram:

- it was difficult to separate and label different identity dimensions in relation to environmental values and transport choices
- different dimensions were involved in transport decisions on different occasions, so the diagram could only ever provide a static snapshot of one decision at any one time
- the diagram alone does not allow for an adequate exploration of the 'core sense of self', as personal attributes, values and characteristics are all contained within a central nucleus which is static and has no prospect of moving.

The categorical nature of the diagram remains problematic. It is useful that the diagram implicitly recognises the importance of the social aspects contained in the outer ring and the changeable nature of the salience of these aspects. Despite the interrelationship between the different identity dimensions in the use of the diagram in an interview situation, there is still an emphasis on seeing the different dimensions as separate entities. The diagram does not easily allow for the nature of the interactions between the

aspects in the inner and outer circles, between the social aspects and those in the core to be explored.

4.2.5 Conclusions of the pilot study

The pilot study demonstrated the value of using task based interviewing as a tool for exploring the role of identity in travel behaviour. It also illustrated that self directed photography was more appropriate for this research than travel diaries, given the less time consuming nature of participation. The photographs were particularly valuable in allowing participants to share their experiences with me more freely in the interview.

The discussions around the diagram in the interviews illustrates a useful aspect that is often missed out of transport research. Transport is often researched in isolation, but arguably the issue of travel behaviour not fitting with environmental values is much less significant when viewed as part of an individual's overall behaviour. Here, for example, travel behaviour is decided in conjunction with other, larger values in mind, and if these are affecting overall behaviour in someone's life, perhaps it is easier for them to discount the environmental impact of an individual instance of travel behaviour in the light of their overall choices. This illustrates the value of researching travel behaviour in relation to identity. The diagram, however, proved to be rather constraining, and therefore the development of a more sophisticated conceptual framework was necessary for the main research.

4.3 The development of the conceptual framework

The conceptual framework for the main research needed to address the shortcomings identified through the pilot study, whilst simultaneously having the capacity to address the research question set out at the end of Chapter Three. A framework based on Harré's social constructionist 'standard model' of identity (Harré, 2001, p60), explored in detail in Chapter Three, was developed.

To recap, Harré's standard model uses 'person' as 'a word for a human being as a social and psychological being' (Harré, 1998, p73). Each person has a series of 'selves', which demonstrate the singularity of each person, and also their changeability over time. Self 1 is singular, and is used to describe 'the concept of self that is embedded in a person's sense of self, of occupying one and only one standpoint from which to perceive and act

upon the environment' (Harré, 1998, p177). Self 1 is the physical embodiment of a person, bodily location, and is expressed through the use of first person pronouns.

Self 2 is more complex, and refers to the 'totality of attributes of a person including that person's beliefs about him or herself' (Harré, 1998, p177). It is manifested through 'the stories one tells about oneself and the actions one performs about oneself' (ibid). Harré also acknowledges that Self 2, which 'includes both one's dispositions and powers, one's current private and public thoughts and feelings, and one's personal history' is not necessarily the same as the beliefs one has about those attributes. He uses the term 'self concept' to refer to these beliefs that one has about oneself, which are thus part of, but not the whole of, Self 2.. Self 2 is multiple, a person can at any one time tell several equally true stories about oneself.

Self 3 is the self of presentation, 'the sort of person that we are taken to be by others' (Harré, 1998, p177). This is complicated by the fact that the self we intend to project may not be the self that others read. Self 3 is the public presentation of aspects of Self 2, including the self concept.

This thesis takes a realist approach to identity – that identity is not formed over again with each social interaction, but rather is relatively stable over time, with fluctuating aspects, and different elements that are presented in social situations. This position requires that identity is knowable – that talking in an interview situation can provide a useful account of identity as an individual perceives it. What is being researched here is what the participants present of themselves; there is no attempt to 'catch out' the participants by uncovering their 'true' identities underneath what they present. That is not to say that identity is unproblematised here, but rather that the emphasis is on people's *impressions* of their own identity and mobility.

It is arguable that only the self concept element of Self 2 can be seen in an interview, as this is what the individual believes about themselves, and there is no way of determining objectively the content of someone's Self 2. This does raise issues around the nature of researching identity, but these are not serious, as this research does not aim for an objective appraisal of Self 2, but rather an exploration of how aspects of Self 2 influence travel

behaviour. Therefore, the beliefs an individual has about aspects of their Self 2 are what is important. It is further arguable that the self concept aspect of Self 2 is only visible through the display of Self 3 in an interview setting. Again, this is not problematic, as aspects of Self 2 are ordinarily displayed through Self 3, and therefore consist of what the individual wishes to portray in any given situation. This does raise the question of bias, of the interviewee aiming to please the researcher by presenting an 'acceptable' image of themselves that they perceive to concur with what the researcher is looking for. This is a danger of all research, and is overcome to some degree by conversation techniques in the interview, by questioning the interviewee about views and behaviours they present, and thus building a rounded picture, and by being non judgmental and encouraging the interviewee, whatever aspects of themselves they choose to present.

Much of the research using Harré's standard model of identity is based around people with Alzheimer's Disease, and aims to draw out different aspects of their identities, and the way these either persist through the development of the disease, or are unable to persist because other people will not cooperate in their production. This work gives insights around how identity changes over time, which aspects of identity are persistent through other changes in life, and the importance of the cooperation of other people in the production of certain aspects of identity. In this context people may be unable to present themselves in the way that they wish because other people are unwilling to cooperate with them, or may be labelled with certain characteristics, such as 'illness' which can then overtake in importance other aspects of identity which the person themselves may wish to portray.

Researching identity in relation to travel behaviour involves analytically separating the selves in order to explore the role each of the different aspects plays in shaping travel behaviour. The possibility of this analytical separation is illustrated through Harré and Sabat's work with people with Alzheimer's Disease. This work demonstrates that Self 1 is constant throughout life, and illustrates the changeable nature of Self 2, and the way that the cooperation of other people is required in the production of Self 3.

Self 2 and Self 3 are difficult, but not impossible to distinguish in an interview setting. Self 2 consists of a person's attributes, memories, and experiences, as well as the self concept, which is their beliefs about those attributes, memories and experiences. It is expressed primarily through Self

3, in the telling of stories, and through actions. Consider the following dialogue from the interview with John, one of the research participants. Prior to this dialogue, the participant was explaining how the attitudes of young people in his local area shaped his son's transport choices.

John: I don't care as much what people think, but it's a gross exaggeration to say I don't care at all. I mentioned my cycling jacket earlier, it's grey, so I can wear that in the pub, whereas if it was fluorescent yellow, I wouldn't walk in a pub with it.

Me: Why?

John: Well, it just singles me out as being different to everybody else, it identifies me as a cyclist rather than being me, who happens to ride a bike.

John regularly rides a bicycle – this fact is part of his Self 2. He is keenly aware that wearing a fluorescent cycling jacket, which he would consider doing to make himself more visible and therefore more safe while cycling, would identify him to other people as a 'cyclist'. The action of wearing a fluorescent jacket would be part of John's Self 2, but it would also send a clear and recognisable signal to others that would identify John as 'a cyclist'. The complication of Self 3 is demonstrated here, in that there is a difference between the self John *intends* to project, and the self that *others read* in his speech and action (Harré, 1998, p177). John attempts to manipulate the self that others read by manipulating his own behaviour – in this case wearing a grey cycling jacket. His intention here is to portray himself as 'John' first, with 'cyclist' being far less important.

This small piece of dialogue also illustrates the multiplicity of John's selves (Harré, 1998, p149). John is a transport planner, a keen cyclist, and an enthusiastic promoter of cycling to other people – all facts which are part of his Self 2. However, in the situation he describes above, of walking into a pub, John does not want to portray, as his Self 3, these aspects of his Self 2, as he feels they would identify him as someone unusual, someone who does not fit in. He therefore chooses a jacket which does not visibly portray these aspects of his Self 2, presenting instead a rather more muted Self 3 which does not stand out.

The fact that John talks about these choices that he makes shows that he is aware of the multiplicity of his Self 3, the variety of tales that he can tell about himself, and the appropriateness of each of these tales in a various of social situations. He is therefore able to manipulate the presentation of

himself through his Self 3 to elicit a favourable response from others by changing a small aspect of his behaviour.

John's example demonstrates the fluidity and ephemeral nature of Selves 2 and 3. With the model,

'both Self 2, one's personal attributes, and Self 3, how one's character and personality are expressed in public speech and action are ephemeral, transitory constructions'

(Harré, 1998, p54).

A person's Self 2 changes over time with developments in capacities, powers, and skills, although Self 2 does tend to show 'a long term stability' once established (Harré, 1998, p54). There are also multiple Selves 3, as demonstrated by the fact that people can and do present more than one story of themselves at different points in time and in different social settings. The following dialogue from an interview with another research participant, Amanda, demonstrates how her Self 2, and thus also her Self 3, has changed over time.

Amanda: I do think about nature, we put food out for birds, and I try and look at different types of birds that are there.... I don't go out into the countryside enough, but that's just where I am at the moment. Part of my degree was in ecology, and I got really into ecology, I was into identifying plants and stuff...

Me: Does that link to you saying you were a bit of an eco-fascist, do those two things link together, or do you see them as separate?

Amanda: They're not as linked as they used to be. I used to see it as so clear cut, whereas now... there's an example, they're going to cut down some willows on an island, I've heard they're diseased so they might fall down and kill somebody, so I'm actually quite happy to get them cut down, cos the old me would have gone, [gasp!], you can't cut those down! Look at all the animals that you're killing! But actually, you can cut willows down, because they do sprout again. There's an obvious link, isn't there, with the way you protect habitat by living a less complicated life... a less pesticide induced, less packaged, less processed life, not just food, but transport, not racing around all over the place... I was going to [study] zoology, I was going to do animals rather than environmental things, and that's when I saw the link... what is the point of saving a cute fluffy panda to put it in a zoo?

Amanda clearly separates her current self from the 'old me' who rallied against the killing of individual animals. Her knowledge has increased, and with this came a change of perspective to a more holistic, ecological world view, focused on habitats rather than on individual animals, in which it is sometimes appropriate to destroy one tree to save a habitat. This change in

worldview illustrates how Self 2 and the self concept change over time, and also manifests itself as part of Amanda's Self 3 through her behaviour, in particular her decision to study environmental science rather than zoology.

4.4 The research process

Complex conceptualisations of identity as 'a continuous, yet changing sense of self' (Kearney, 2003, p52) have a number of methodological implications. Methods used must be flexible enough to allow for the exploration of a variety of aspects of identity with each individual. There must not be a presumption towards categorisation, as this inclines the research towards identifying homogenous patterns rather than accepting and exploring difference. Individual participants should be enabled and indeed encouraged to explore aspects of their own identity within the conversation of the interview, and not be too restricted by an interview schedule or questionnaire design.

Twelve participants were recruited using purposeful sampling to cover a range of ages, genders, family and work situations, and transport habits. Following recruitment, they were given a disposable camera, and asked to take photographs on a journey. Following this, an in-depth interview was conducted, using each participant's photographs as a basis for the discussions.

This section describes in detail how the main research, following the pilot study, was carried out, beginning with an explanation of the selection of the participants, and a description of some of their most relevant characteristics. It moves on to discuss the process of photo elicitation, and details of the in-depth interviews and how these were carried out. The final parts of this section consider the analysis of the interview data, and ethical considerations of the research.

4.4.1 Selecting and recruiting the participants

Twelve participants for the research were selected using purposeful sampling (Patton, 1990), whereby the emphasis is on sampling for information rich cases (Hamberg et al, 1994). The aim was to cover a range of ages, gender, family and work situations, and travel behaviour, with this leading to there being sufficient variation around the role of identity in shaping travel behaviour for the research worthwhile and credible

(Hamberg et al, 1994). A table of the main characteristics of the participants can be found in Appendix 1.

The participants were recruited using snowball sampling via a network of contacts. Potential participants were contacted by telephone and, if they were interested in taking part, an information sheet was sent to them. This can be found in Appendix 2.

Overall, a key methodological aim of the research is for it to be transferable (Hamberg et al, 1994) – that the research is analytically generalisable (Silverman, 2000), able to be transferred to other situations, for the patterns of aspects of identity identified here to be recognisable elsewhere, despite the particulars being different for different people, and for them to interrelate, and to impact on environmental values and transport choices in similar ways. From a policy perspective this is important. Identifying recognisable patterns in the relationship between identity and travel behaviour has the potential to indicate policy measures for encouraging pro-environmental behaviour.

4.4.2 The use of self directed photography

My research aims to explore the different feelings, behaviours and motivations around transport in relation to people's identity, and visual methods can provide a useful starting point for these explorations. Hockey and Collinson (2006, p70) suggest that visual methods are useful for researching repetitive, public, social patterns, such as the way that people walk or drive to work, which are taken for granted and unproblematised. Transport in daily life is largely a habitual activity, perhaps not inspiring constant reflection.

There is a growing interest in the use of visual methodologies in social research (Gauntlett and Holzwarth, 2006, p82), more recently those methods which ask people to create something themselves, then reflect on their creation of it. Such methodologies have used videos, collages, and Lego Serious Play as ways of accessing people's feelings about their identities and experiences, giving people time to explore these things without feeling under pressure to answer questions immediately, as would be the case in a normal social research interview. This has advantages over simply asking people to explain their travel behaviour without a hook like the photographs. Here, people are 'invited to think about who they are,

the different aspects of themselves that they bring to the world, and what they think are significant aspects of their identity' (Gauntlett and Holzwarth, 2006, p86). The difference between this and ordinary social research interviews is that people have time to reflect on what they think, who they are, and their motivations and identities.

'Most people can't really provide accurate descriptions of why they do things, or like things – let alone their identities and motivations – as soon as you ask them. But most language-based studies capture and preserve those instant responses as "data"'

(Gauntlett and Holzwarth, 2006, p84).

This assumes that people can know something about these things, and can provide useful insights for the research. A seemingly opposite argument is given by Kraus (2000), who argues that when talking, individuals are inclined to want to give a coherent narrative about their identities, and are therefore likely to smooth over incoherence and inconsistencies. This element of 'forced coherence' 'blocked the expression of that what was so precious to us, the display of ruptures of identity which could not be easily mended' (Kraus, 2000). A strategy for overcoming this, argues Kraus, is to introduce an element of spontaneity, as 'having the interviewee react spontaneously may result in an openness which will change his or her attitude in the situation. Furthermore spontaneity may lead to a subjective truth which even the interviewee is not aware of.'

Both methods are aiming for a deeper understanding of identity, but one attempts to gain this by allowing more time for the individual to reflect and come to their own conclusions, the other by creating a climate of communication where incoherence is accepted, and introducing an element of spontaneity.

My research recognised and made use of the strengths of both arguments. Asking people to take photographs in advance allowed them time to consider their transport choices as they made them, as well as to consider the story they wished to present about themselves during the research. This may have included an element of forced coherence. The reflections by participants before the interviews were around transport choices, and the environment, and people's own environmental values and whether they contradicted their transport choices rather than about identity, as this was a means of looking at transport choices and the environment.

Hockey and Collinson's research explored their own experiences as long distance runners returning to running after long injuries, and focused on their actual experience of the routes they took when out running. They identified the importance of 'ways of seeing' (Hockey and Collinson, 2006, p71), acknowledging that

'what is actually seen in these situations is dependent upon the knowledge that has been accumulated via previous experience of the activities themselves. Ways of seeing are structured by specific kinds of knowledge, which are in turn informed by the act of seeing itself, in a complex circular process.'

In a similar way, Moore et al (2008) used photographs to explore the experience of living in a city, asking participants to take photographs and explore 'spatial-temporal stories' (p61), articulating thoughts and feelings about places, and giving a deeper understanding of the perceptions and experiences of urban living.

It is these aspects of the use of visual methods that are pertinent for my research around transport and identity. Visual methods can capture sensory experiences, and help researchers to 'understand the daily routines of the participants,' as well as to 'document social relationships that exist between people and the spaces they inhabit as well as relationships among people within those spaces' (Joanou, 2009, p214). In my research, photographs are used to give more insight into an everyday experience – travelling from one place to another – and to allow the participants to take more notice of their experiences on a journey in order to provide a prompt to help them to tell me, as the researcher, about those experiences and the underlying knowledge and feelings that encompass them. In a similar way to Moore et al (2008), asking people to take photographs as they travel can enable people to look at the places they live in and move through in a new light, shedding a deeper understanding for them as they explore what is important enough to photograph, what story they want to tell to the researcher about that place (Packard, 2008).

I did not ask the two participants in Denmark to take photographs. This was primarily for practical reasons, mainly that there was little time available, for contacting people in advance, asking them to take photographs, getting photographs developed and then arranging interviews. This lack of photographs meant that the interviews took on a different character, being much more researcher-led, and focused more closely around the interview

schedule rather than an exploration of issues as they were brought up by the participants. The possible implications of this for the way the interviews were conducted and the data collected are discussed later.

Each of the ten participants in England were sent an information sheet (see Appendix 2) and a disposable camera by post. The cameras had a voucher for free processing, so participants were instructed that they could either take the camera to the appropriate shop and send me the photographs in the prepaid envelope, or return the camera to me and I would process the photographs. The advantage of processing the photographs themselves would have been that the participants could see the photographs before the interview – however none of those who used the disposable cameras chose to do this.

On the information sheet, I explained, as I had done on the telephone, that my PhD was about ‘the way people travel in their daily lives, and what influences this.’ I explained that the research is looking at

- How people travel, and why they travel in that way
- How people see themselves, and present themselves to others, in relation to how they travel
- How and what people think about ‘the environment’
- How people interact with ‘the environment’
- Awareness of environmental messages surrounding travel, and how these influence decisions

The idea behind not giving people specific instructions about what to take photographs of was to allow them to determine what was important about the way that they travelled to tell me about in the interview. Packard (2008, p66) gave instructions saying ‘take pictures of things, people and places that are important to you in your daily life.’ This is the idea that the participant becomes the guide of the interview (Joanou, 2009, p214), allowing the researcher to follow someone around their everyday life (Moore et al, 2008, p53). I had, of course, given some cues as to what I was interested in overall. This resulted in participants bring up all kinds of knowledge and experiences that I might not have otherwise asked about (Packard, 2008, p65). For example, Figure 4.2 shows a photograph taken by Louise from the top of the railway bridge at her local train station, as she

walked from home to the pharmacy.



Figure 4.2: Louise's photograph of what used to be a row of local shops

This is one of a series of photographs Louise took 'just to show you, to see really what you see when you walk up to the shops.' Louise had taken these photographs to demonstrate the lack of useful local shops, the plethora of estate agents and hairdressers in the local area, and the lack of anywhere other than the expensive convenience shop to buy fresh fruit and vegetables. This led on to a discussion of where Louise does buy food from, during which we explored her values around food, her feelings around what makes her feel comfortable in particular places, and why she travels to one place rather than another to do her shopping.

Louise's discussions around places were then brought into later interviews. This demonstrates the development of the research as it progressed, although does raise the question of how much the participants at the beginning were disadvantaged by being first to be interviewed.

Participants interpreted my instructions in different ways, illustrating in part the degree of autonomy inherent in the use of this method (Dodman, 2003, p293). I did not specify or provide a log sheet to log what each photograph was of, like Moore et al (2008) did, which did result in some pondering and

slight confusion during some interviews as to what each photograph was of. Andrew created what he described as a 'photo essay' with several of his photographs, which he emailed to me in advance of his interview, detailing his journey to school with his daughters, with photographs showing specific parts of the route and text describing what he thought was significant about it. One of the photographs is shown below in Figure 4.3, and to accompany it, Andrew wrote:

'The traffic can be fast but is not normally dangerous. There are three bus stops which present a hazard in trying to pass a bus. The last part of the road is especially dangerous as the road gradually narrows and the buses almost invariably block the bike lane.'

Lindsay chose to travel by train, a mode of transport she normally does not use at all, as she thought it would be good for my project – demonstrating the way in which participating in the research can change someone's behaviour. For Moore et al (2008), this is one of the fundamental advantages of visual methods, encouraging people to think about mundane behaviours in new ways through reflecting on what to take photographs of, and what stories to tell to the researcher.



Figure 4.3: Andrew's photograph of a fast road

Harper (2002, p20) found that the use of visual methods was most useful if they broke the frame of reference of the participant; he provided aerial

photographs of farms which enabled farmers to think about more general methods of farm management and their changes over the years – it jolted them into a new understanding of their situation and experiences. Lindsay using a different mode of transport than usual appears to have done this to a smaller degree, and it resulted in some of her own preconceptions about train travel being challenged – a successful case of changing perceptions and making someone look more closely at the reasons why they do something in order to create a deeper understanding.

I gave every participant a disposable camera, but several of them chose to use their own digital cameras to take photographs, again illustrating the degree of autonomy involved in the use of self directed photography. This raised several issues. The photographs taken with the disposable cameras were generally of a much lower quality than those taken with the digital cameras. People who used their own digital cameras could view their pictures before sending them to me, and could therefore choose which pictures they felt comfortable sending, which was obviously not the case for people using disposable cameras. People dealt with this in different ways – Lindsay for example gave me a CD with all of the photographs they had taken on the day of their journey, both of the journey itself and of the flower festival in a nearby town that they had travelled to. Donald sent me a much smaller number of photographs, and they were not all taken on one journey at all, rather they were photographs of things to do with transport that he felt to be significant.

The act of taking a photograph ‘is an act which renders some things visible, and therefore important, and other things invisible and less important’ (Packard, 2008, p69). Participants who used digital cameras had a degree of control over which photographs to send me, and although each of the interviews covered all of the photographs that participant had sent to me, I chose which photographs would be included in this thesis, therefore exercising some control over the information presented.

All of the participants were keen to show me their photographs, although many apologised for the quality of the photographs that they sent me, an issue also encountered by Packard (2008, p71) in his research with homeless men, many of whom were embarrassed by their technical skills and inability to use a disposable camera, and therefore became reticent when confronted with photographs they had taken with their finger in front

of the lens, for example. The degree of photographic competence in this study was high, but it still raises an interesting point about one of the limitations of the use of self directed photography in research. People found it difficult to take photographs that represented the point they wanted to make, a situation experienced by Hockey and Collinson (2006, p73) who had to discard many of the photographs they took because they 'failed to demonstrate visually the elements of the route we were trying to capture – for example, uneven, rutted ground.' The point here is perhaps that, as Hockey and Collinson suggest, the skills of the photographer do not necessarily live up to their own imagination and therefore this limits the usefulness of the method – but to some extent this only applies if the photographs themselves are being analysed separately. When photographs taken by participants are used in interviews as a tool to facilitate discussion and understanding, the participant is able to tell their story to the researcher using the photographs as a memory aid and to provide a shared image and context, rather than the photograph itself telling the story.

Another interpretation is that things like Hockey and Collinson's 'uneven, rutted ground' cannot be adequately photographed because they actually do not exist, or rather they exist primarily as an impression, a preconception in the mind of the photographer. One photograph in particular taken by Lindsay's husband reveals the danger of reading too much into one photograph, and demonstrates the value of talking to the participants about what was happening when they took the photograph, what they took the photograph *of*, rather than having the researcher collect in photographs and analyse them separately at a later date (Dodman, 2003). The photograph is shown below in Figure 4.4.



Figure 4.4 Lindsay's husband's photograph of litter on a train seat

It shows a small collection of litter on a train seat and, and without explanation it is reasonable to assume that the photograph was taken to illustrate the amount of litter on the train. This is indeed why the photograph had been taken. However, Lindsay and her husband had expected that there would be a lot of litter on the train, and that was indeed their

perception, but when they came to take a photograph of the litter, there was not sufficient to illustrate their perception, so Lindsay's husband 'gathered it together' to 'make his picture look better.'

This alteration of the environment to sufficiently demonstrate the point one wishes to make has several possible explanations. The camera, or the skill of the photographer, may have been insufficient to portray the image of what they actually saw. What is important is Lindsay's intention of portraying the amount of litter on the train, as this was her perception of her experience. She explained during the interview that 'trains are too dirty in this country' – a point she backed up by talking about the cleanliness of trains she had travelled on in other countries. This was an important enough part of her journey, and of her feelings around transport in general, that she wanted to take a photograph to demonstrate it to me, and was

willing to alter the environment in order to take that photograph that would illustrate her point.

This raises issues around one of the fundamental advantages of the use of visual methods in social science research. Self directed photography allows the subject of the research to become to the guide (Joanou 2009, p214), allows the researcher to follow someone around their life (Moore et al, 2008, p53), and, perhaps more importantly, allows the participant to tell what is important to them. One of Lindsay's perceptions about train travel, and one of the reasons she gave for not using trains regularly herself, was that the trains themselves were dirty and litter was not cleaned up, and this is the story that she relayed to me, even though she had found it difficult to take a photograph that portrayed this. Getting participants to explain their photographs themselves overcomes one of the fundamental limitations of the use of photo elicitation – the assumption that each photograph is an accurate reflection of the environment. Photographs are snapshots, taken at one moment, 'and cannot be taken to represent the entirety of that person's lived experience or even how they always feel about a particular place' (Dodman, 2003, p297). This research overcomes this issue by not expecting the photographs to be accurate reflections of the environment, but rather using them to explore how the participants felt about the environments they were travelling through in discussion with the interviewer during the interview. The important issue in this situation is that Lindsay's perception was that there was lots of litter on the train, and this discouraged her from using trains, rather than the actual amount of litter.

The difference is significant, although it is also important to acknowledge that Lindsay's perceptions were perhaps challenged by her struggle to gather enough litter for a decent photograph – something that she acknowledged.

The impressions people have about the way that they travel, the environment they move through, are, in this research, what is important, rather than the realities of the environments themselves, and although the context is important, this research deliberately did not set out to 'catch people out' and deliberately undermine their impressions by confronting them with the realities of train timetables or amounts of litter. The fact that photographs are subjective interpretations of the world (Moore et al, 2008, p61) is precisely what reveals the interplay of interpretations that were

being explored through the in-depth interviews to unpack people's feelings, experiences and identity in relation to transport.

There are several ethical issues raised by the use of visual methods in research. The ownership of photographs is one such issue – do the photographs belong to the participant, or to me (Joanou, 2009, p217)? The participants who used digital cameras were able to keep copies of their photographs, whereas those who used disposable cameras were not – although John did ask to keep one photograph of a wrongly painted signpost which he intended to pass to his colleagues at the council. Taking photographs in public places could be perceived as an invasion of privacy (Joanou, 2009, p217), and although some participants did take photographs of themselves and their families, I have not used these throughout the thesis in an attempt to retain anonymity of the participants and the public in general.

Throughout the thesis, some photographs are used to illustrate specific points made by the participants, or to demonstrate characteristics of the places they talked about. The photographs are presented in the context of the discussion, as they appeared in the interviews. No attempt has been made to alter the photographs in any way.

4.4.3 The interviews

This research follows both Harré's and Sabat's in adopting an approach based primarily around in-depth interviews. Together with the use of self directed photography, this allows for a participant-centred approach of the exploration of the role that identity plays in the relationship between environmental values and travel behaviour.

The interviews were open ended in format, and lasted between one and two hours, with most being around sixty to ninety minutes. All interviews took place in participants' homes, with the exception of Emma, who was interviewed at her workplace. Interviews were recorded with consent, using a digital recorder.

The interviews were structured around the interview schedule, which took the form of a mind map, a series of concepts, drawn from the literature, to address within each interview. The use of a mind map in this situation rather than a list of questions was a deliberate choice. Rather than channel each interview down a specific route organised by my pre-determined

questions, the use of a mind map with which to guide the conversation allowed ideas and thoughts to flow within the interview situation, and allowed the conversation to cover a variety of themes centred around the research question.

One of the significant advantages of the use of a mind map in this situation is that it allows all of the themes to be covered in the interview to be seen at a glance, on one page. Themes are placed on the map as specific prompts rather than as questions, which allowed me to guide the conversation into directions we had not covered, rather than jolting the conversation with the introduction of a new question on a new topic suddenly. This follows Lofland's (1971) notion of interviews as guided conversations.

After introducing myself and the research, and explaining the format, each of the UK based interviews began by handing the participant a printed copy of the photographs they had taken, and asking them to explain the content of the photographs and their reasons for taking them, and asking some questions of clarification as they did so. For many of the participants, discussion of this journey formed a thread throughout the entire interview. At certain points, participants' comments about their experiences of travelling along a certain bus route, for example, prompted a question from me around a wider issue related to the conceptual framework of the research, about whether this was a common experience on buses, or whether they had experienced something similar on other modes of transport.

In each interview, all modes of transport were discussed at some point, including participants' experiences of travelling by each mode, and their views of the relative sustainability of each mode. There was not a set list of questions about this – rather it was included on the mind map interview schedule, and when each mode arose in conversation, the opportunity was taken to discuss it in more detail. This schedule was the starting point for the discussions in the Danish interviews, which were not focused around a particular journey. This discussion was often prompted by the participant themselves, often in relation to a particular photograph. For example, Emma's photograph of her local train station on a shopping trip to meet her mother prompted her to discuss her daily commute to work. For that journey, she gets a lift with her husband to the train station, and he then

drives to his job nearby. Emma gets the train into the city centre, then walks to her office. It takes her exactly 30 minutes:

'I don't think you could get a better commute than mine. I suppose it's not high on my priority list, but it is nice to be reasonably environmentally friendly, even though we've got the car, it's nice to think, oh well, I'm using public transport.'

Although we were not at the time talking about environmental values, Emma's photograph of the train station prompted her to think about her daily commute from the station, and this in turn prompted some thoughts around her feelings about it being relatively environmentally friendly. Discussions of this nature threaded throughout all of the interviews. Again, this was not a specific question, and in each case, a comment from the participant prompted a question by me probing their views in further depth. In this way, the conversation covered environmental values, other values, and how these values began and were influenced by other people, and their relative importance in making transport decisions.

The differences between the two interviews in Denmark and the rest of the interviews gives a good illustration of the value of using self directed photography in this kind of research. The interviews which did use photographs flowed more easily, were much more led by the participants, and gave a much richer, wider variety of information than those without. I was able to let the participants tell me what they thought was significant in the journey that they had photographed, leading to a more general discussion around transport, whereas the interviews without photographs, while there was discussion of journeys, were not as detailed as those with photographs. This may be because photographs act as memory aids within interviews, reminding participants of details they otherwise may not have remembered about journeys. It may also be because the two participants who had not taken photographs had not been asked to think about a specific journey in advance, and therefore had not had time to remember details. Or it may be because the act of deciding what photographs to take leads the participant to thinking more deeply about their journey as well as about the feelings and experiences they wish to portray to the researcher.

There were occasions in the Danish interviews where a photograph would have perhaps been useful to help foster understanding between the interviewer and participant. And it was more difficult for the interview to be wholly focused around the experience of the participant, as the

photographs were not there as a medium for them taking control of the direction and pace of the interview. As a result, these two interviews were much more researcher-led, and there is a possibility that, because of this, the discussions were less rich in detail.

There were also issues around language in the two interviews in Denmark. Ingebjorg spoke English very well, and only occasionally appeared to struggle for a word. Helsa was much less confident speaking in English, and was often hesitant about finding the right word, or worried that she was not explaining herself properly. I do not speak Danish at all. This meant that in Helsa's interview, we perhaps could not have as full discussions as in the other interviews.

4.4.4 Analysis

As stated previously, the photographs taken by the participants were used as an introduction to the interviews and as a way of giving the participants some control over the research process, rather than as standalone data to be analysed separately. Therefore the process of analysis focuses on the interviews. Each interview was recorded using a digital recorder and transcribed by me.

The empirical material was coded with the aid of a mind map (see Appendix 3). Initial coding reflected Jackson's (2001, p202) process of looking for patterns in the empirical material while simultaneously reflecting on the conceptual issues framing the research. At this stage the codes were at a descriptive level, using participants' own words describing the experiences of different modes of transport, as well as about transport in general, about the environment, and about participants' views of themselves and other people in relation to transport and the environment

The second stage of coding involved looking across the whole group of transcripts, and grouping the descriptive codes into a series of more analytical codes, after a period of reflection (Cope, 2003, p452). This stage involved drawing together the descriptive codes with the initial broad themes from the literature, and identifying further potential analytical codes. At this stage, there were still a large number of categories, including 'relationships,' 'mental and physical health,' 'nostalgia,' 'isolation,' 'priorities,' 'community,' 'location' and 'values.' These can be seen in more detail on the mind map in Appendix 3.

The third stage involved grouping these analytical codes into a much smaller series of broad themes. These broad themes included 'the role of values in influencing action,' 'interacting with the physical environment' and 'the influence of childhood experiences on later mobility.' These broad themes were used to develop the structure of the three analysis chapters: environmental values, place and people. The themes were not intended to be exhaustive, but rather to allow the analysis of the empirical material in relation to the conceptual issues identified as framing the research (Jackson, 2001, p208).

4.4.5 Ethical considerations

This research did not raise any significant ethical concerns, and this chapter has addressed various issues, such as trust and participant direction of interviews, which have arisen during the course of this research.

I ensured that all participants knew the extent and outcomes of their involvement in the research. Each person was asked verbally if they would take part in the research, and when they agreed, was sent further information about the research in advance of the interview, along with directions for taking photographs and a disposable camera. Participants were given a telephone number to contact me if they had any difficulties. Each participant signed a form consenting to the use of the interview transcripts and photographs within the research, and acknowledging their right to withdraw from the research at any point.

To overcome issues of confidentiality, names of the participants were changed. I have not used participants' photographs which contain their faces. I have also generally avoided reference in the thesis to names of specific places mentioned by the participants, to avoid identifying them. Such places are referred to by description alone, generally using the participant's words. In the case of places participants have visited in the past, for example, or where a place is associated with a specific characteristic that it is deemed important to illustrate, this has been relaxed. Although such anonymity does to some extent risk a depersonalisation of the context in which the participants live, it is hoped that avoiding specific place names will avoid preconceptions associated with such places, and

instead allow the participants to talk about their personal impressions of the places they live.

4.5 Conclusion

This chapter has outlined the development of the conceptual framework through the trial of a pilot study. Identity is conceptualised as enduring, yet changing, including an individual's physical embodiment as well as both internal and external selves. The aim of the research is identified as being to explore the role that identity plays in shaping travel behaviour. It was considered most appropriate to address this in a qualitative way, through a combination of self-directed photography and in-depth interviews.

Chapter Five will introduce the twelve participants through a series of vignettes, which help to produce an insight into the storylines that make up people's identities.

5. Introducing people

5.1 Introduction

So far this thesis has explored the literature around changing environmentally significant behaviour, specifically around transport, and identity. The methodology set out the approach of the research, and reflections on the way that approach worked throughout the collection of empirical material. This chapter is the start of a series of four chapters analysing the empirical material gained from this research. It introduces the people involved in the research through a series of partly fictional vignettes and people's own photographs, and goes on to set out the range of views towards transport modes and travel in general. Appendix 4 contains a table setting out key aspects of participants' travel behaviour, for ease of reference and comparison across the participants. The table covers location, household situation, key journeys, sample environmental values, and significant obligations and time constraints.

The vignettes are written as stories, from the viewpoint of each of the people involved. These were written by me, using situations and comments taken from the interviews with participants. Their construction is based on the idea of ethnographic fiction, drawing data together to emphasise and frame specific themes and conclusions (Sparkes, 2002, p1). They are designed to present a pen portrait of each participant, to highlight the key issues that they face, and the context within which their identities are formed and their mobility decisions made. As stories, they provide a glimpse into the lives of the participants, drawing on the social construction of participants' identities and the interaction of the selves to provide an account of each individual. This allows the context of the empirical material to be preserved (Spinney, 2007, p30), and presents the reader with an holistic impression of each person to set the analysis which follows in context. The twelve individuals are being presented as people, as individuals with different lives, relationships, and situations, and it is intended that the vignettes will provide a foundation to enable the reader to begin to build a picture of each of these individuals.

5.2 Vignettes

Emma



Figure 5.1: Emma's comfortable footwear

Emma looked out of the window. It was raining – she'd have to change her shoes. Her husband was dashing around getting ready for work, making sure the dishwasher was loaded and the recycling outside ready for collection. Emma glanced at her watch – they'd miss the train if they didn't hurry. They got in the car, and her husband dropped her off at the train station, and then went to work.

Emma stood on the draughty platform, and returned nods of recognition from some of the other commuters. The train came, and she struggled to find a seat. There was no ticket inspector on the train, so yet again, the journey was free. After twelve minutes, Emma got off and walked to her office. She looked at her watch again and smiled – 27 minutes door to desk, and environmentally friendly too! She began work.

Later in the day, Emma was flustered. She'd had to walk around a lot, still had work to do, and if she missed the 4.45 train there wasn't another until 6.45. Whose idea was that? Her husband would pick her up from the train station at least, she didn't want to walk up that hill with all her bags.

She thought about the evening. She might go for a run when she got in, get rid of the hassles of the day. They were going for dinner with friends later – they'd drive, which meant they wouldn't have a drink, but at least no waiting around for the bus, or expensive taxis. They could even pick up the shopping for the week on the way, then they wouldn't have to make a special trip.

Their friends were heading for Brussels at the weekend – she was flying alone, he was travelling by train and ferry with his mother. "Honestly," thought Emma, "I don't know how she stands it! Environmental values are all very well, but surely it's more important to be together?"

On the way to the train station, she picked up their monthly car magazine from the newsagents. Flicking through it she sighed – maybe one day they'd be able to afford a better car than their Toyota Corolla...

Dan

Dan opened the back of the van, and checked his tools were in order. He put in his lunch, the bottles for recycling, and his climbing gear – ropes, shoes, helmet. He switched the radio on, and drove through town to pick up his colleague, then they set off on the slow drive to Staffordshire. At least they didn't have to go that far today – they'd already travelled to Edinburgh, Bristol, and back up to Durham this week. And at least the scenery on the way was pretty – good job really, since they'd probably be stuck in traffic looking at it for quite a while. Dan felt sorry for the people who lived in the houses alongside the road. Surely a bypass in this case would be a good thing, as ugly as they were?

Dan and his colleague enjoyed a hard day at work, and drove back to Sheffield, inevitably getting stuck in traffic again – two hours for 30 miles! But Dan didn't mind, work was paying, he had the radio and his mate, and he wasn't on the bus. Dan dropped his colleague off at home, and headed out in the van to meet his friend at the crag to climb in the last hours of sunshine, winding down the window and enjoying the drive. He was glad he could use the work van and didn't have to rely on other people for a lift. He climbed a more difficult route than last time, and made it to the top, breathless and happy, looking down into the valley and his waving friend below. Dan shouted to his friend to hurry up – it'd start going dark soon. He watched as his friend climbed, then they packed up and set off back to the pub for a well deserved pint.

In the pub they talked about climbing, and cycling – they were off for a weekend of mountain biking. They laughed about taking the cycling proficiency test as a child, and about how they had had more freedom to cycle around on their own than kids now. Dan had spent his summer holidays as a teenager cycling eight miles to his job as a lifeguard. He didn't cycle much now – all his friends lived within walking distance, and he had the work van for longer trips. He kind of missed cycling to work, whizzing past people stuck in their cars, past the crowded, slow, smelly buses, and the steep, rewarding climbing back home to the top of the hill.

Ingebjorg

Ingebjorg poured the breakfast cereal for the children while her husband made sandwiches for the picnic. She looked out into the garden – what a treat! They'd only recently moved from an apartment in the centre of Copenhagen, and, while her husband would have to get used to the new bus system, Ingebjorg loved having a garden for the children to play in.

The family set off for the bus stop, the eldest daughter cycling along the pavement, and the three year old skipping along. Ingebjorg smiled fondly at her excited children. They enjoyed travelling by bus, being high up, not having to wear seat belts, and it meant that they could take the pushchair for when the youngest got tired.

At the zoo, Ingebjorg got out the suncream. It was a 'natural' variety – Ingebjorg didn't like to use chemical products on her children, she was worried about their health and future fertility. It was funny, when she was a teenager, media stories were about not using chemicals for the sake of the, 'woods and the water;' now it seemed more to be about personal health. 'I suppose it doesn't matter if the effect is the same', she thought. Her daughters ran around on the grass in the fresh air.

On the bus home, the children tired and happy, Ingebjorg and her husband discussed the arrangements for the following day. Ingebjorg's husband had to be in work early, so she'd take the children to kindergarten, and then drive to work, and he could pick them up on the bikes on the way home, the eldest loved cycling anyway, and the youngest could go in the bike seat. They were still settling into a routine after moving house.

Driving to work the next morning, Ingebjorg could see the queue of traffic on the other side of the road. 'I don't know why people bother driving into the city centre,' she thought, 'the roads are narrow, and the place is polluted enough as it is.' She knew she'd probably think differently if she had to make the journey by train every day, the trains were nearly always late. She stopped herself and laughed. Even after talking to her friend at work, who'd been researching the way people told themselves negative stories about public transport, she'd found herself doing the very same thing....

Helsa

Helsa cycled through the park, onto the cycle path, and headed to the train station. She got out her book, and settled down to read for the hour long journey to work. They sped out of Malmo, and headed for the bridge into Denmark. Helsa didn't mind the travelling, she was glad to be living near her daughter, and anyway, it was far cheaper to live in Malmo than Copenhagen. As for the train journey, it was far less stressful than driving all that way, and she couldn't afford a car at the minute anyway. Maybe next year she'd have saved enough to buy one to share with her son when he turned 17. They'd like one of those environmentally friendly hydrogen ones, but they were far too expensive.

Helsa thought about the evening. Her daughter and grandchildren were coming round for tea, she'd have to make something special. Mostly Helsa ate organic, vegetarian food, particularly for her health, after being diagnosed with cancer. She'd always fed her children organic food, as her daughter had eczema, and it was better for her. She preferred it that way for environmental reasons too. 'Maybe we'll have something with bacon,' she thought, 'I don't want them thinking I'm too fanatical!'

It hadn't been like that when she was younger. In the 1970s, Helsa and a couple of other families had built an energy efficient house, which they'd lived in communally. They had a dream of Denmark converting entirely to organic agriculture! That'd never happen now. Although some of the students in the university were studying things like that, maybe they'd find a way to make it happen....

Louise

Louise looked at her watch as the kettle boiled. Did they really have time to walk to school? 'Oh, dash it,' she thought, 'it's important, I'll just have to rush about a bit more later.' Louise and her daughter quickly ate breakfast, and Louise put the dog on the lead. They walked to school together, waving to the old man round the corner, and a lady coming out of the shop on the way, and Louise stood chatting to some of the other mothers, while her daughter skipped off into the playground to join her friends.

As they chatted, a car screeched to a halt, a child got out, and the car drove off again. Louise and the other mothers thought it was shameful that the poor child's parents never got out of the car. 'Some people haven't walked their children to the school gate all the time they've been here!' they said, 'are they really that busy?' 'They probably think we're idle and have nothing to do other than stand around chatting,' said Louise.

Back at home, Louise fed the dog and put some washing on. She grabbed the shopping list, her handbag, and the car keys, and drove to her doctor's appointment. One day she'd get round to walking, but there was just so much to do, she didn't seem to be able to fit it all in without driving. She had to get the weekly food shopping today as well – it was such a shame that the nearest town was so shabby, and the local village was full of estate agents and hairdressers – it meant she had to drive even further to somewhere nice, and then she only had time to run around Asda, and it was hard to get local fruit and vegetables in there.

On the way from the supermarket back to the school for her hour as a lunchtime supervisor, Louise suddenly remembered the plumber was calling in the afternoon. She swore. Why did she always have to arrange everything on the same day? 'Never mind,' she thought, 'my husband's in, although he'll just go for the cheapest boiler, when I wanted a more environmentally friendly one. I'll just have to put up with it.' Dashing home from the school, she found her husband up a ladder fitting a drain pipe on to a water butt. They were trying to save water now, after a friend had started a bit of an environmental campaign. Not that they had much to use the water for; their garden was mostly gravel, but the thought was there.

The door bell rang. Louise sighed, wondering if she'd get chance to sit down at all before having to dash back to the school to pick her daughter up. Why was everything such a rush?

Lindsay

Lindsay and her husband Derek stood on the train platform. They were quite excited, they hadn't travelled by train for years, but they were taking part in some research about their transport habits, and thought it would be more interesting to talk about a train journey than their ordinary car trips. They were a bit worried that they couldn't see anywhere to buy tickets, but a big sign told them their train was due, so there wasn't time to look any more.

Lindsay settled down to look out of the window, leaving Derek in charge of the disposable camera – he enjoyed that sort of thing, and seemed to be busy collecting litter from around the carriage to take a picture of. Lindsay wondered what he was up to, but thought it best not to ask.

The train gradually filled up, and eventually some young lads got on, laughing and swearing. 'You can stop that language in here, young man!' shouted Lindsay, 'I'm not listening to it!' The lad got up and sat next to Lindsay's husband – he could see that Derek was wearing hearing aids and thought he was being clever. 'Enough of that, wise guy,' said Lindsay, 'shut up, or I'll make you!' The boys moved into another carriage.

The rest of the journey passed uneventfully, nobody even came to collect their tickets. They had a nice chat, and it was relaxing not to have to concentrate on driving for a while. Mind you, it was all a bit unreliable and inefficient to use all the time, and neither the trains nor the buses went anywhere near work or church. It was that Labour government, too busy running around with other people's wives to be funding public transport properly, that was it.

When they got home, the answer phone light was flashing, and the builder was just packing up his tools. Lindsay listened to the message – a lady offering to give her a lift to church the following day. Lindsay rang her back. 'Who else can we pick up?' she asked, 'it's more social if we have a car full, it'll save on the petrol costs too, and, after all, we've got enough gunk in the environment round here with that stupid Shell stack at the end of the road.'

After a chat, Lindsay put the phone down, and it rang again almost immediately. 'Is there no peace in this house?' she said. It was her youngest son, asking to be picked up from his friend's house later in the evening. She was always running round after them! Lindsay smiled. She loved it really....

John

John looked at the four bikes in the hallway. They were taking up quite a lot of space.... He thought perhaps he should rearrange the shed to fit them in – maybe a project for the weekend. He carried his road bike out of the door, and headed for the riverside path, which was far more pleasant than cycling to work down the main road, even if it did take a bit longer. He watched the ducks as he cycled. At work the cycle racks were nearly full. John shook his head – he'd explained so many times that more people cycling to work, which is what the council wanted, would mean they needed to provide more storage facilities, but the message didn't seem to have got through yet. Never mind.

After a frustrating day full of meetings with high up bus company officials who never travelled by public transport, despite their free passes, because they were too attached to their enormous cars, John and his colleagues decided to go for a drink. He was offered a lift to the pub, but he had his bike, so he cycled up the hill to meet them, being glad that he was so used to cycling that he could manage the Sheffield hills without too much discomfort. He was also glad that his cycling jacket was grey and not fluorescent. He did count himself as a 'cyclist', but sometimes people saw the bright jacket and assumed that there was nothing else about him, which was annoying. However much he loved cycling, it always made him feel like a bit of an outsider, like he was in a minority, and if people found out he'd given up his car, well! However much he told himself it was a lifestyle choice and not a moral stance, he wasn't sure other people would see it that way, and he didn't want to seem judgemental. By the time he reached the pub, John had worked himself up into feeling quite defensive.

As he headed back from the bar, a colleague from another department hailed him. 'Hey, John, I saw you driving a posey sports car the other night, what's that about? I thought you were one of these environmental types!' John smiled wryly. This is what he'd been afraid of. He hated driving his son's car, and only ever did it when his son begged to be picked up from the airport or somewhere. And he'd been seen in it! It was so far from what John ever would have driven, it made him cringe. The evening passed pleasantly enough, and after a couple of hours, John got on his bike to cycle home, smiling at the thought of not having to get an expensive taxi. That was the reason he'd started cycling after all, to save money, and now they'd got rid of their car, that was a huge expense gone, one the kids were using mostly anyway. 'I'm a typical tight Yorkshireman' he smiled to himself.

Paul

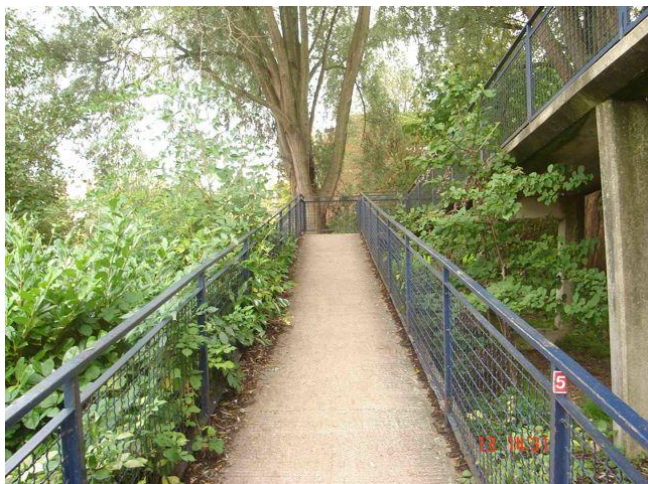


Figure 5.2: The accessible bridge on Paul's journey to town

Paul stopped on the bridge for a chat with a mate who was passing. It was a warm, sunny day, so he was happy; he loved the sun. 'I'm so lucky getting a flat out here by the river,' he said to his friend, 'and with this path into town too.' They chatted for a while, and watched the ducks, and then went their separate ways, Paul heading into town to pay the Green Party cheques into the bank.

Paul gritted his teeth as his wheelchair bumped over the cobbles. It was irritating, but the other way round was a lot longer, and at least this way was pretty, and not full of tourists and people not looking where they were going. The buildings were pretty too.

On the way back from the bank, Paul stopped to look in the window of the travel agents. He would never go on any kind of package holiday, he much preferred to be off the beaten track, to experience the local life, but it was good to have a look at the cheap flights in the window. He sighed. He knew it was hypocritical, being the local Green Party treasurer and jetting off all over the world for holidays, but he'd recently cut down on flying, and he did so hate the nasty weather of English winters, and there was nowhere interesting in Britain to go on holiday....

So maybe he could justify one flight, on top of a couple to visit his father in Jamaica, there was no way he was giving up visiting family for the sake of the environment. 'If I've got to do anything, which I suppose I should,' he thought, 'I'll use my van less.' But he'd had so many bad experiences on public transport – no room for the wheelchair on buses, trains with no ramps and nobody to help, being squashed into taxis. Maybe the van would have to stay after all.

Donald



Figure 5.3 Donald at a cycling exhibition

Donald fastened his cycling helmet and looked around the street. Children were playing in a garden, a young couple walked hand in hand along the pavement, and an old lady walked slowly, pulling a shopping trolley. Donald smiled. He took a simple joy in 'street theatre,' watching ordinary people going about their everyday lives. He got on his bike and headed for the train station.

As he was cycling down the main road, a car pulled out of a side road just in front of him. Donald shouted, 'oi!' as the driver made a rude hand gesture and sped off down the road. Donald chased after him, shouting, 'you stupid man!' but he was clearly not going to catch up with the car, so contented himself with shaking his fist at the retreating car.

A little further down the road, Donald stopped to help a man who seemed to be having difficulty crossing the road. As Donald stepped out with his fluorescent jacket on, hands aloft, to stop the traffic, he realised to his surprise, that the man he was helping was the husband of a friend! They had a nice chat about classical music, and Donald went on his way, thinking how nice it was to be able to get off his bike and chat, rather than sealed inside a car.

At the train station, Donald's train was delayed, and then the platform was changed, and the lift was broken, so a guard offered to help Donald carry his bags over the bridge. Donald picked up his bike and strode purposefully up the steps, leaving the guard struggling and red in the face at the bottom. 'Come on, young man!' boomed Donald, 'I'm 70 years old and I can manage it! You need more exercise!' Eventually, Donald settled onto the train with his book and his sandwiches, enjoying having time to relax, look out of the window, and watch what others on the train were doing. And he was very much looking forward to exploring a new city on his bike.

Amanda

Amanda wiped milk from around her youngest son's mouth, while trying simultaneously to eat a piece of toast and encourage her eldest son to put his shoes and coat on. Finally, they were all ready, and she picked up her pile of leaflets and they headed to school, the youngest child riding in a child seat on Amanda's bike. On the way to school, the boys waved to a couple of their friends in cars, and all three of them shook their fists at a passing 4x4. 'Boo hiss!' shouted the eldest, enthusiastically, and Amanda smiled – maybe she was being too much of an eco fascist....

At the school, the eldest boy ran to join his friends in the playground, while Amanda joined a group of other mothers, and started handing out leaflets. 'They're about palm oil,' she explained. 'They put it in everything and you have to kill the trees to make it, and it's really bad for the environment.' They chatted for a while, then left.

Amanda and her youngest son whizzed home on the bike. 'Weeeeeeeee' they shouted, the little one very excited. He couldn't wait until he was old enough to have a bike all of his own like his big brother. Amanda laughed; she loved cycling, loved feeling free, going fast, the wind in her hair. And here in Oxford, she felt part of something bigger, everyone cycled. When she lived in Stoke on Trent, she thought, she'd ended up on the front of the local paper described as a, 'gung ho mother' for cycling with her son in a bike seat. How ridiculous! She loved the sense of a more alternative community there was where she lived now.

Amanda nipped into the local bakery round the corner from the house to get some fresh bread, have a chat, and drop off some leaflets. 'Are you still doing all that climate change stuff?' asked the woman in the bakery. 'Yes,' said Amanda, 'it's so important, and I'm not working, so I've got time, and I can take the kids with me if I need to. And I love it, I met George Monbiot the other day!'

Amanda cycled towards home, stopping at the bus stop to chat to a friend she hadn't seen for a while. She loved that about living in Oxford, and about public transport, you always bumped into someone you knew. Her and the boys were getting the train later in the week to visit the boys' dad in Staffordshire, and the boys were really looking forward to the journey too.

Amanda arrived home and got herself and her son back into the house. The phone was ringing, the door bell rang as soon as she'd got off the phone, and her son spilled a drink over a pile of old Ecologist magazines. A normal day, then....

Jim



Figure 5.4 Jim's narrowboat on the canal

Jim crouched down by the side of the canal and held his breath. He had been walking home from work, and had spotted a particularly beautiful dragonfly landing by the water, which, when he looked more closely, seemed to be laying eggs. Jim had seen this before, but he was always fascinated by those small miracles on his doorstep, they

made him feel close to nature, in some ridiculous hippy way.

When the dragonfly had flown off, Jim continued his walk home, watching the ducks paddling in the water, and the sun starting to set. It had taken him over an hour to walk from the bus stop, but it had been worth it, he loved walking, and it was a nice break after sitting in a classroom all day.

Jim eventually arrived back at his narrowboat, which was moored on an exceptionally pretty part of the Macclesfield Canal. He went inside, and made himself some tea. As he ate, he heard thunder, and large raindrops plopped into the water.

Jim smiled shiftily, shut the curtains on the windows next to the tow path, and got a video out of the cupboard. He felt so guilty watching this, it went against everything he stood for, all his principles, and if people knew, it would change their good opinion of him.... But he couldn't deny this side of himself, he had to indulge it sometimes; cycling gave some of the same adrenaline rush, but it wasn't the same as the real thing.

Jim lit the stove, and settled down on the sofa, the wind gently rocking the boat, for an evening of watching the Grand Prix, as guilty an environmentalist as ever there was....

Andrew

The sun was shining as Andrew and his wife and their three young daughters headed out of the house, all dressed in fluorescent jackets and cycling helmets. They waved to the man over the road, who smiled to see the daughters being helped onto the two tandems, with the youngest strapped into a bike seat. Then they all set off down the road, the young girls cheerfully calling to each other and pointing things out to their parents.

They turned onto a busier road. There were a lot of cars, and quite a few buses – the most dangerous of all, Andrew thought. They gave off such fumes, and were far too big for these tiny city streets.

After a particularly dangerous roundabout, Andrew and his eldest daughter turned down a side road to the junior school, while his wife continued on to drop the two youngest at infant and nursery school, and then go to work herself.

After dropping off his daughter, Andrew took the cycle lanes back into the town centre. This was one of the great advantages of cycling, he thought; you could just stop off at the market for food, without having to worry about traffic and parking. And anyway, it was a much quicker way of getting the girls to school, and it meant that they all got a bit of exercise in the morning, which would otherwise be difficult with busy working and family life. Oh, and there was the environmental aspect too – that was an added bonus.

Andrew packed the shopping onto his bike, and headed back through the now quieter streets for a pleasant day working from home.

5.3 Attitudes to transport

This section sets out in detail the range of attitudes among the research participants to various modes of transport. In doing so, it begins to draw out issues that will be explored in more detail in Chapters Six, Seven and Eight, around the negotiations that must take place within families, and the balancing of different aspects of identity with practicalities of living situations and obligations to other people.

5.3.1 Public transport

This section covers what are considered to be some the most easily available forms of transport, more environmentally friendly than cars, and often encouraged as alternatives to the private car by people promoting pro-environmental behaviour. This section does not include flying, as this is generally not considered to be 'public transport' in the same way as trams, buses and trains, is not as widely available or considered at all environmentally friendly, and the journeys are not comparable. Flying is therefore placed in a category of its own. This section will cover attitudes towards buses, trains and trams, and then bring discussions around the three modes together with observations about attitudes towards the use of public transport in general amongst the participants.

5.3.1.1 Buses

Several aspects of bus travel are considered significant by participants, although they had different effects on bus use. Buses are in general considered expensive, and inefficient in terms of both time and routes taken. The three key issues which emerge in relation to bus travel were the physical environment inside buses, control over journeys, and interactions with strangers while using buses. These key issues will be addressed in turn.

The cleanliness and pleasantness of the environment inside buses is considered important by participants, both those who use buses regularly and who do not. Some participants have had experience of poor quality bus environments, and this has discouraged them from using buses in the future. For example, Louise used to travel to work in a nearby city by bus, but the buses were 'foul... really old and smelly, and I've never seen so much gunge!'

'I spent the morning once going to work on the bus, and the exhaust fumes were actually coming in through the back, under the back seat, and the driver didn't stop, he didn't do anything, it was just [coughs], very smelly and horrible!'

Similarly, the buses on Jim's route to work were previously 'really battered, knackered old things, which were noisy, and dirty really.' These have, in Jim's case, been replaced by new buses, which are

'clean, and bright and [have] nice great big windows... you've got really good visibility, I can look out of the window.'

The cleanliness of the buses greatly enhances the enjoyment of the journey for Jim, and in a similar way, Louise finds the buses which run on the 'park and ride' route to her nearest city much more pleasant. She is happy to travel on these newer, cleaner buses, but remains unwilling to use 'ordinary' buses after so many negative experiences.

For the other two key issues surrounding bus travel, interaction and control, there is a marked difference in attitudes between participants who use buses regularly and those who do not.

Participants who travel regularly by bus generally perceive interactions with other people positively, although this is in a slightly different way to perceptions of interactions on train journeys. On the journey where she took the photographs for this research, Amanda met a man she had not seen for five years, a family friend – 'I actually thought he'd died!' She really values the potential for chance meetings with friends and acquaintances that travelling by bus holds.

Participants who do not regularly travel by bus, however, appear to take less pleasure in the public element of bus travel. For Louise, a large part of the undesirability of bus travel is caused by the unpredictability of fellow passengers, and in particular the fear that other people will delay the journey when she is on a tight schedule:

'I've had too much of people being stroppy on buses, I've been on buses where people have been so awkward that the driver's stopped and wouldn't go any further til they got off.... Sometimes it's sort of gobby types making noise and they won't get off, or one bloke had only paid to so far and then he wouldn't get off again, and the bus driver wouldn't go and he wouldn't get off, and everybody was getting really irate, because we were stuck on our way home from work. You just don't want to be stuck because some idiot won't get off the bus.'

Lindsay also comments on the potential for ‘people that aren’t really desirable’ to be on the bus, and also having to hear other people’s music when they are listening to headphones.

Using buses involves relinquishing a degree of control over one’s journey – bus routes are usually based on timetables, and operate on predetermined routes with fixed stopping points. The exception to this is some rural ‘ring and ride’ type routes, which offer a door to door service somewhat like a shared taxi, and which operate in more remote rural areas. None of the



Figure 5.5 Jim’s view from the bus window

participants in this research live in remote rural areas, and these types of buses are not included here. The abdication of control over some elements of journeys is viewed rather differently by participants who are regular bus users, and those who are not.

Overall, those participants who use the bus regularly tend to be those who like to relinquish control, whereas those who value a lot of control over their journeys tend to be those participants who do not regularly travel by bus.

Some people relish being temporarily free of responsibility, with Jim, for example, seeing bus journeys as an opportunity for ‘relaxation time’, a chance to daydream. For Jim, bus journeys are a chance to look out of the window at the landscape, and to remember times spent walking through the areas the bus is passing. One particular route, to his mother’s house, brings back lots of memories, as it goes past his old school, and places he remembers from childhood.

The lack of responsibility is also appreciated by some participants travelling with children, as well as by the children themselves. Ingebjorg’s son and daughter love to travel by bus, enjoying looking out of the window, as well as the freedom of being able to travel without being constrained by a seatbelt. Amanda also values the freedom bus travel affords to her children:

'they had a great time messing around on the bus, they just go and sit by themselves, and I feel relaxed enough to let them go off and sit by themselves... they just always mess around on buses, but it's quite safe.'

Other participants find the lack of control over their journey when travelling by bus problematic. Dan, for example, likes to 'be in control' of his journey, and perceives buses to be both unreliable and more time consuming than walking:

'they take ages to come, and I find generally that I go and wait for the bus to go into town, say, that when I've stood there, waited for it to come, queued in traffic to get into town, I could have walked there in probably only about five minutes more.'

This lack of control may be more pertinent for certain journeys than others. Lindsay, for example, talks of the inefficiency of her local bus routes, and comments that for elderly people for whom the bus is their only way of getting around, 'maybe to have a bus that goes round all those places you don't see very often... might be like a little day out', but for people who are trying to get to an interview, or an appointment, 'you've got no chance.'

The lack of control over bus routes, stops and timetables raises issues around the routes that people have access to, and whether they go to the places they want and need to travel to, at the times they want and need to travel. Several participants comment that their local routes are unreliable, with buses not arriving at the advertised times, or else the routes are long and convoluted, or require two separate bus journeys for them to get to their destination. This is slightly less of a problem for participants living in cities, as routes tend to be more frequent, but even then, the design of the city can itself influence the available routes, with journeys from one outer area to another often necessitating a trip to the centre first, meaning that car travel, cycling, and sometimes even walking, can be quicker than taking the bus.

Overall, buses are used primarily for local journeys, and so among the participants are more likely to be in direct competition with cars, cycling and walking, rather than trains. They are perceived to have inefficient routes, and to be expensive when compared with other modes of transport, and there are issues around reliability, particularly when used for journeys to work, for example. Control over the journey and interactions with other people are big issues around bus travel, but these tend to be perceived

differently by regular bus users when compared to those who do not use buses regularly.

5.3.1.2 Trains

Trains are perceived rather more positively than buses among the participants, and are more often used as alternatives to cars on journeys the participants make. Several participants have recently taken trains rather than driving when visiting large cities, for example, to save problems with parking, and driving through busy traffic on unfamiliar and confusing roads. Among the participants, journeys taken by train tend to be longer than those by bus, and although this research does not directly compare journeys taken by participants, this may reflect the nature of the bus and train journeys in general.

Some of the issues around bus use can be observed around trains too. For example, individuals must relinquish a certain degree of control and abide by train timetables, as well as fixed stops and routes. These are largely more restrictive than buses, because of the additional infrastructure required. Other issues also arise which are perhaps more specific to train use, in particular around interactions, material and social structures, and multitasking.

The potential for multitasking – carrying out other activities while travelling – is cited in the research as one of the major benefits of travelling by train. Participants enjoy reading, relaxing, sleeping, eating, listening to the radio, playing with their children, and working. These activities are often considered unsuitable for bus travel, Amanda, for example, cannot read a book on a bus as she feels travel sick. It is generally considered an advantage to be able to do these things while travelling, both by participants who regularly travel by train, and those who do not. It allows people to feel that the time they have spent travelling has not been wasted, but rather used productively.

The presence of other people on trains is also considered significant, both by participants who use trains regularly, and those who do not. Views among the participants ranged from very positive, to fearful.

Amanda, for example, enjoys the public aspect of train travel, and very much appreciates the opportunity to meet and talk with a variety of people

while travelling by train. She describes a number of the people she has met while travelling on trains recently:

'I met a professor who invited me to go and stay at his house or something, I don't think he was chatting me up, but he was being really friendly! And I met someone who offered me a job, and... the other day I met a nuclear submariner, told him I was going off to Faslane to do an anti-nuclear protest, so that was quite fun!'

Amanda values this experience of meeting people 'from all over the country' very much, and sees it as 'massively important', 'you sort of get a gauge about what's going on in the country.' Amanda feels this is a positive experience, enabling her to counteract the negative impressions of the views of the 'man in the street' from the media:

'if you're actually sitting on a train, you're having a discussion with someone, and they're saying "I hate all this racism, all these anti-refugee things", it's nice, you're finding out what people actually say.'

Donald, too, feels it is 'more civilised' to have contact with other people while travelling, and relishes the opportunities to meet and talk to strangers that train travel affords.

At the other end of the spectrum of views, the presence of other people on trains is a significant deterrent to their use. For example, Louise describes her fear of the unpredictable behaviour of other people on trains. Her local station in particular is 'lonely', and although the trains themselves are 'ok', 'there's never anybody on them, and it makes you a little bit nervy.'

'People can be intimidating, I've been on the train once when somebody's been sitting there talking to themselves, obviously completely barmy, and there's nobody else on there, well, it's fairly unpredictable behaviour, isn't it?'

Louise finds this unpredictability of other people particularly disturbing when travelling with her young daughter, 'if you're travelling with a child... it's harder to up sticks and move somewhere else...you get much more protective.' This fear of other people is exacerbated for Louise by the absence of people of authority, people she perceives to be trustworthy and that she feels able to turn to in an emergency:

'You never see a guard or anybody that you could ask if there was any problem, there's nobody to approach, if there were people there that you could approach if you felt uncomfortable that might be different, but there aren't any, and in these days of not speaking to other people in case you set anybody off, you don't feel that you could go to somebody else either. We went on the train [to the

pantomime] because there's lots of shoppers, and then, because it didn't finish til half eleven, it's quite late, so we got a lift home.'

Louise feels safer in the day time, surrounded by 'shoppers', people she perceives as familiar, as similar to herself. However, at night, this changes, and she feels very uncomfortable without an authority figure present.

Part of this fear surrounding other people when travelling by train perhaps stems from aspects of the material and social structures surrounding train travel. Participants generally feel happier and safer at large, well lit and well populated train stations, Emma, for example, felt happier once she had arrived at the station in Manchester, as there were shops, and lots of other people around. This is in contrast to Louise's earlier description of her local, small, 'lonely' train station, where she does not feel at all comfortable, a feeling reflected by Emma when travelling from her local station particularly at night. On buses, the unpredictability of other people is perceived more as a nuisance, potentially causing a delay in journey times, whereas on a train, unpredictable behaviour becomes more threatening. This is perhaps due in part to the proximity of the driver to the bus passengers, giving a feeling of security and some measure of authority.

One other aspect of train travel, mentioned by a small number of participants, but significant, is the bureaucracy surrounding travelling by train, particularly in relation to travelling with either a bicycle or a wheelchair. In order to travel by train, Paul must telephone to book assistance three days in advance, and in some cases is still not guaranteed a space on the train. After several bad experiences, where assistance has been booked but not arrived, he has chosen to no longer travel by train. Donald's experience is different – he often travels by train with his bicycle, and again, is required to reserve a space three days in advance, or risk not being able to get on the train. Donald prefers to risk this, as he prefers 'to take pot luck and get there early'. However, there is often no dedicated space for bicycles, and he must prop his in the vestibule, and 'be alert to moving them if necessary'.

5.3.1.3 Trams

Trams inspire less vehement opinions among the participants than other modes of public transport, and generally appear to be viewed more favourably, and to be considered acceptable where other public transport is not. Only three participants live in close proximity to a tram service, and

none of them use trams regularly. However, Dan, for example, perceives them to be 'a great form of transport', primarily because they are 'clean, and quiet, and easy, much better than buses.' Similarly, John describes how his teenage son and friends will travel by tram if a car is not available, but never by bus, as the tram is seen as being 'better class'.

5.3.1.4 Public transport summary

Overall, the 'public' nature of public transport, being confronted with what Ingebjorg describes as 'other people's smells and smiles', is one of the most significant aspects of its use among the participants, although this is viewed both positively and negatively. Public transport is seen by some as a space of social possibilities, a place for potential encounters, with both strangers and old friends. For others, the unpredictability of other people's behaviour can be both a nuisance and a threat.

The importance of both physical and social aspects of the infrastructure surrounding public transport is considered significant by participants. Cleanliness of both vehicles themselves and stations is important in the enjoyment of a journey, and the presence of staff members, and other people individuals identify with in some way aids feelings of safety and security, and makes people feel more comfortable.

Control, while valued in some way by all participants, is a significant factor in decisions around public transport use. Participants who like full control over all aspects of their journeys tend to be those who use public transport less often, or only in very specific circumstances, while others either enjoy the lack of responsibility, or are willing to accept the loss of some measure of control in exchange for other benefits, such as the ability to carry out other activities while travelling. This multitasking is considered to be a major benefit of travelling by train in particular, as the perhaps longer journey times become time for working or relaxing, and thus are less likely to feel like wasted time.

One aspect of travelling by public transport that emerged in this research is the amount of knowledge required. Lindsay comments favourably on the amount of signs and instructions in both vehicles and stations on her train journey, which she feels is particularly important for young people travelling alone for the first time. The necessity of learning how to use public transport is often overlooked, and in the promotion of public transport use,

there is perhaps therefore a role for the teaching of skills such as how to read timetables, where to purchase tickets, and how to plan journeys effectively.

5.3.2 Active transport

5.3.2.1 Walking

Walking is promoted by the government as an environmentally friendly transport mode, and a good way to add exercise to daily routine, and therefore an ideal way to travel for journeys under two miles. All of the participants walk to some extent, including Paul, who describes travelling in his electric wheelchair as 'walking'. However, there is a great variation among participants as to what is an acceptable walking length for a journey, and this in part depends on whether they view walking as contributing to other aspects of their lives, or merely as a transport mode.

When walking is perceived just as a transport mode, and compared to driving, or travelling by public transport, the main issue seems to be around the time the journey takes. Dan, for example, finds some journeys quicker to walk than to travel by bus. For Emma, the opposite is true:

'we drive a minute and a half to get to the shops, but I would never walk it. I walked it once, but I can't do it again... I was so annoyed that I spent time walking that shopping home.... It's not worth it, it's just too much hassle.'

Emma will walk much further than this for pleasure, and indeed runs much further than this each week, but 'resents' spending time walking home with shopping, as she sees this as 'a chore'. For her, the amount of time and energy she is willing to expend directly relates to whether the trip is for pleasure or is perceived as work, including domestic work.

When walking is considered to be exercise as well as a form of transport, seemingly as intended by the government, then the time element becomes less important. For example, Dan often walks to visit friends, journeys which can take up to an hour, but he is conscious of the health benefits of exercise, and also would 'rather be outside than in a vehicle'. Dan engages in other forms of exercise in his spare time, such as climbing and mountain biking, and views walking to places as an opportunity to contribute to his overall fitness levels.

The health benefits of walking are recognised by many participants, but this is not necessarily a strong enough inducement to use walking as transport, rather something to be appreciated when one does walk. Emma is unique among the participants in separating exercise and transport entirely. For example, she describes what her journey home from the train station would be like if she walked:

'I'm always carrying at least two bags coming into work, and I'm usually wearing work type clothes, which I find are difficult to walk in, and hot to walk in. I just get really flustered... if I've got a suit on and I've got to walk up the hill. It's a mile, but by the time I get to the top with two bags, I'm just flustered, and it makes me more stressed.'

Emma also likes shoes, and is 'usually wearing something highly inappropriate' for walking any distance. Emma would rather 'drive up the hill and then go for a run when I get home.'

Walking is also perceived as a way of relaxing, and in some cases as almost a spiritual experience, and a way of connecting with one's surroundings. For Jim, for example, who lives on a narrowboat, the journey to work depends on where his boat is moored. He tries to moor in 'beautiful areas', which often means he has quite a long walk to reach a bus to work each morning.

'I don't always feel like it first thing in the morning, but it's a lovely walk from there into the town, especially when there's no traffic around... and most of the mornings I've done that you hear woodpeckers, owls sometimes.'

Jim loves canals, his 'home environment', and very much looks forwards to being able to walk along the canal at the end of each day. In a similar way, Donald, who lives in a large city, sees walking as a way of experiencing the 'street theatre' going on around him.

'I decided I would be my own religion... and work for human beings out of care, and love, and entertainment... so walking down the [...] Road... there's always a bit of street theatre going on, I don't mean in the literal sense, but two weeks ago, I'm walking down there and there's a bloke with a pushchair and he's trying to get across the road, but there's no crossing, and he looks a bit anxious about it, and I think he must be an overseas visitor or something, and I said "can I help you across the road?", and I'm wearing my bright yellow jacket, so I just put my hand up and stopped the traffic! And it turns out he's a composer, who's working where I used to work... and his wife is somebody [my wife] knows and sings with, so the kind of networking, of humanity, of the joys of that, are what I mean.'

This feeling of love, of joy in surroundings, is visible in both Donald and Jim, and contributes greatly to both their positive experiences of walking as transport, and their desire to continue to do it.

The benefits of walking in terms of exercise are recognised by most participants, although this has differing levels of impact on their behaviour, according to other priorities. In addition to this, participants also recognise the benefits of walking in terms of being in one's environment, whether that be the natural environment or the local community, and the interactions and pleasure this brings.

5.3.2.2 Cycling

Cycling is promoted as a pro-environmental transport alternative to car use by government initiatives, in a similar way to walking, with an emphasis on slightly longer journeys. The health, financial and environmental benefits of cycling are stressed. Cycling is used as a mode of transport regularly by some participants, and infrequently by others, and there are several key issues around it, in particular the safety aspect of cycling, and the importance of infrastructure.

For cyclists, safety is deemed an important consideration by the participants in several areas. Bad weather, while generally being only an inconvenience, can potentially be dangerous, particularly, for example, high winds, which could blow cyclists 'into the path of a bus' (Dan). Pedestrians are a potential hazard, stepping into the road without looking, which emphasises the importance of a bicycle bell as a warning (Donald). By far the biggest danger to cyclists, however, is perceived among the participants to come from other road traffic.

Among the participants, those who do not cycle at all tend to have a much higher perception of the dangers of cycling, reflecting Dan's comment that people who are unused to cycling in traffic find it more frightening. In contrast, those who cycle more often tend to be less concerned about the safety aspects of cycling, and also tend to be those who have been involved in one or more accidents where they personally have been injured. John, for example, cycles to work regularly, and has been knocked off his bicycle three times in the last twenty years, and Amanda has been hit by a car on several occasions, once resulting in a serious injury. However, for regular cyclists, the benefits of building exercise into one's daily routine, as

well as quicker travel times than by public transport, and the flexibility and independence that comes with cycling far outweigh the potential dangers.

Cycling with children is perceived to be fraught with danger, again, particularly by those participants who do not do it. Those who do are careful about taking safety precautions, particularly ensuring their children wear helmets and fluorescent jackets, although there are a range of views on cycle trailers, with Ingebjorg enjoying hers, but not feeling 'fit enough' to use it at the moment, to Andrew, who feels they are 'completely inappropriate', as there is 'a real danger that the kids would just get crushed because they're too low for motorists to see them.'

The hazards encountered by cyclists are, among the participants, perceived to be in part either mitigated or exacerbated by various features of the social context and physical environment. Physical features can both assist and encourage cycling, as Helsa finds in Denmark, with lots of bicycle paths, small roads, 'good bicycle roads'. However, at other times, the physical environment can make cycling difficult, for example John describes a pedestrian safety scheme, where a pedestrian refuge was built in the middle of the road to assist people crossing, but the width encourages drivers to believe they can overtake cyclists while passing the refuge, resulting in dangerous situations. This, believes Donald, reflects a

'cultural gap between cyclists, people who cycle regularly, and those who design and construct things which may or may not help cyclists, but which are meant to be dealt with by cyclists.'

There are elements of the social context which can both encourage and hinder cycling, and participants cited a range of examples which affect their own cycling habits in various ways. For instance, both Ingebjorg and Helsa describe a 'tradition' of cycling in Denmark, and a high cycling rate throughout the country. Similarly, several participants commented on the different cycling levels in cities throughout England, with Amanda in particular having moved from one city to another where the rate of cycling is higher, and where she as a consequence feels more 'part of the puzzle' when cycling.

This links in part to the provision of cycling facilities at destinations, and workplaces in particular. Participants both who do and do not cycle regularly cite the availability of secure cycle parking and showers at workplaces as important incentives to encourage people to cycle. Emma,

for example, specifically lists the lack of such facilities as a reason why her husband does not cycle to work, and John, who works for a local authority which encourages cycling, thinks it is 'bizarre that we don't have enough cycle parking for the obvious demand that we've got'.

Overall, those who cycle regularly share similar motivations. Andrew, for example, who cycles to school each day with his three young daughters, cycles because of

'flexibility as well as speed and efficiency... it keeps us fit... and finally... you do feel good, we are doing very very little damage to the environment by doing this.'

Flexibility, speed, independence and fitness appear to be the most prominent reasons for cycling among the participants, with others also citing financial benefits of less car and public transport use, and all commenting on the low environmental impact of cycling, although none of the participants, whether regular cyclists or not, see this as their main motivation for cycling.

In summary, several of the aspects of cycling that people most enjoy – speed, flexibility, independence, the ability to control one's journey and not be restricted by a public transport timetable, reflect the advantages people cite in relation to car travel, suggesting that there may be significant possibilities for movement between the two modes. However, there are several barriers in terms of the dangers of cycling, which appear to be perceived to be highest by those who do not cycle regularly, as well as inadequacy of infrastructure provision.

There is a general trend among participants towards those who cycled in childhood and young adulthood then cycling regularly in adulthood, even if there is a gap of several years in between. This perhaps suggests the importance of experience in facilitating cycling, and suggests there should be more emphasis on the provision of cycle training in schools, for example.

5.3.3 Private transport

There is a range of views about cars among the participants, and unlike public transport, opinions are not necessarily divided between those participants who do and do not use cars regularly themselves. Only two participants in this research cannot drive, and the experience of learning is

considered so important and formative among those who can drive that this begins the section. Following this is a discussion of the aspects of car travel that participants most value, and finally of the concerns that participants have around travelling by car, in particular around health and the environment.

Learning to drive is recognised as a necessary skill in a way that learning to use public transport is not. Perhaps because young people cannot legally drive until they are seventeen, learning to drive has become associated with passage into adulthood. Several participants describe how their families encouraged and even expected them to learn to drive at seventeen, in some cases paying for driving lessons for them.

Those participants who did learn to drive as teenagers particularly value the independence it gave them from their parents, even if they did not own a car themselves and had to borrow their parents' cars. Louise, for example, who left school at sixteen, was already working at seventeen, in a job several miles away with unsociable hours, and was relying on her dad to drive her to work. For her, learning to drive and buying her own car did not lead to her doing new journeys, but allowed her to be independent on the journeys she already did. In other cases, learning to drive brought new-found freedoms. For example, Emma learned to drive at seventeen, and this allowed her and her boyfriend at the time, who is now her husband, to meet more often without relying on their parents, and to go on days out together. They both have fond memories of this time, and both associate driving and being in a car together with the memories they have of this early part of their relationship.

Some participants learned to drive later in life, and for these people it tended to be a specific incident that prompted this, for example John's wife being pregnant and him wanting to be able to make the 'dash to the hospital', and Lindsay's realisation that her parents were getting older and would potentially need taking to hospital appointments. Lindsay was also looking for a job at the time, and thought that being able to drive would increase her chances of getting one, perhaps a delivering job.

Participants who drive value similar things about cars, particularly the control they have over the journey – when to stop for breaks, for example, and what time to set off. They also appreciate the speed, as well as the

freedom to change their plans, to not be affected by the weather except in extreme circumstances, and to be able to take luggage with them.

However, there does not seem to be any particular attachment to cars among the participants, with the possible exception of Emma, who watches Top Gear, and buys car magazines. All of the other participants do not have any particular attachment to cars, and of those who can drive, several choose not to do so regularly, for a variety of reasons ranging from financial, to concern for the environment, to a desire to stay fit, to a general preference for other forms of transport. Even those participants who do drive regularly use other forms of transport as well. Their use of other forms of transport is often limited to particular journeys – for example when travelling into a city, or on holiday, or walking short distances for local journeys. Lindsay and Louise who are perhaps most reliant on their cars – Louise walks to school (which is very close), and occasionally to the local shops, and travels to large city by train (although got husband to pick her up again). Lindsay drives a lot, but shares her car, and travelled by train for this research because she thought ‘it was a nice change.’

This demonstrates a significant point: many people use more than one mode of transport depending on the circumstances. This perhaps illustrates the difficulty with segmenting populations by transport mode. If an individual uses several transport modes, and switches between them, defining them by their use of one mode, for example as a ‘motorist’, or ‘cyclist’, misses some of the nuances of their travel behaviour, and precludes an exploration of their motivations for use of other modes.

In general, participants express several concerns about car use, both their own and in general, particularly around health, and around the environment. In terms of health, both air pollution and a lack of exercise are considered problematic, particularly in relation to children, and several parents feel it is important for their children not to become too dependent on travelling by car. All participants know about environmental issues, and have considered them in relation to their own travel behaviour, and many even express feelings of guilt about their behaviour. However, in most cases this is not enough to stop them from driving, although their environmental beliefs are translated into their behaviour in other areas of their lives, for example the food that they buy, or the way that they dispose of their waste.

5.3.4 Aeroplanes

All of the participants recognise the environmental impact of flying, but this recognition has a range of impacts on behaviour, depending significantly on circumstances in participants' lives. At one end of the spectrum, neither Jim nor Amanda will fly at all because of the environmental impact, which Jim feels particularly strongly about in relation to nature – 'I'd be destroying the thing I love most of all'. Jim's response is to use other methods of communication to keep in touch with friends he has in Eastern Europe, for example email and telephone calls. Similarly, Amanda recently travelled to Spain by train for a friend's wedding.

For other participants, the environmental impact of flying feels irrelevant, as it is something they do very little of for other reasons. Louise, for example, prioritises staying at home with her daughter over working full time, and therefore cannot afford 'expensive holidays'.

Other participants are willing to limit their flying, but not give it up entirely, and this tends to be because they have family members who live abroad. Paul's parents, for example, were immigrants from the Caribbean, where his father has now moved back to, and he feels that 'either you break family ties and don't see them, or you have to fly there'. He does not consider this a luxury, but because of his increasing awareness of environmental issues, he has consciously cut down on the amount of flights he takes to other places. Similarly, John's daughter lives and studies in Germany, and he has visited her several times. His feelings of 'moral responsibility' to do something about environmental problems are balanced against wanting to keep regular contact with his children. John therefore chooses to fly, but considers himself to act in an environmentally friendly way in other areas of his life, and is eagerly awaiting the introduction of carbon credits to offset his flights.

5.4 Conclusions

This chapter has introduced the participants in the research individually through a series of pen portraits, and set out in a descriptive way the range of views among the participants of different modes of transport, both those they use and those they do not. Several key observations have emerged that will shape and filter through the following analytical chapters. First, people value similar things when travelling – convenience, independence

and flexibility in particular – but they each get these things from different forms of transport. Control is a slightly different issue, as some people place great value on this, whereas others prefer to abdicate responsibility entirely.

Secondly, perceptions of transport modes appear to be shaped by experiences, but often inversely, so for example those participants who do not cycle or travel by public transport regularly have a higher perception of the dangers and inconveniences associated with these activities. It is not possible to assess whether they do not use these modes because of their perceptions, or whether when people do use such modes, their perceptions change.

Thirdly, travelling with children is raised as an issue for all parents in the research, particularly in relation to obligations in terms of school, danger, and children's enjoyment of transport modes, particularly cycling.

The following three chapters draw on the information provided in this chapter, to explore the participants travel behaviour particularly in terms of the model of identity put forward in Chapter Four. Chapter Six will explore issues around environmental values and travel behaviour, examining in what ways behaviour is shaped by environmental values for different people. Chapter Seven discusses the role of places in shaping travel behaviour, exploring in particular the physical reality of places and infrastructure, as well as the emotional attachment and interaction people have with places. Chapter Eight discusses in detail the relationships participants have with other people, and the way these shape travel behaviour, both in terms of obligations participants have to other people, in particular children, and the way families shape travel behaviour of young people. Chapter Nine will go on to draw together the themes raised in the three analytical chapters to provide a rounded picture of how identity shapes travel behaviour for each of the participants, and what can be inferred from this more generally.

6. Environmental Values

6.1 Introduction

Chapter Two explored how the links between environmental values and behaviour have been researched and encompassed into policy making. The assumption that there is a direct link between environmental values and pro-environmental behaviour has been questioned through research into the value-action gap.

The conceptual framework developed in Chapter Three situates environmental values as part of the internal self. This chapter makes use of the empirical material to explore the role that environmental values, as part of identity, play in shaping travel behaviour.

The whole chapter provides an analysis of the role of environmental values in shaping travel behaviour through their situation as part of identity. It explores the way that values change and develop over time, forming part of the stable yet changeable identity framework. This is relevant because it allows for the potential for values to be changed over time, and also because it demonstrates how a number of different values can be tied to the same actions, even in the same person.

The first section considers the different levels of significance that environmental values have as part of identity for different people, and the way this manifests itself in their travel, and other, behaviour.

The second section uses Stern's concept of 'value orientations' to explore the varying motivations for environmental values – what is it that is being valued?

The third section explores the relationship between environmental values and travel behaviour, and draws on the conceptual framework to look at the way environmental values shape travel behaviour for different people. There is also a discussion around the role of feelings of responsibility in shaping behaviour, and a consideration of whether pro-environmental behaviours must necessarily stem from environmental values.

6.2 Environmental values as part of identity

In the conceptual framework of this research, environmental values sit within an individual's internal self, and interact with other aspects of the internal self, such as skills, memories, and physical traits, to influence behaviour. They can also be demonstrated to the world as part of the external self. For each individual, environmental values play a different role in shaping travel behaviour, according to their status within the internal self, and their relative importance in relation to other factors in an individual's life and identity. This section concentrates on the significance of environmental values within the internal selves of the participants, and how this is demonstrated through the external self.

The significance of environmental values within identity for participants can be seen as a continuum, from those for whom environmental values are such a significant part of their identity that they play an important role in shaping behaviour, through those who consider it important to behave in an environmentally friendly way, through to those at the other end of the spectrum for whom environmental values play a relatively small role in their identity.

For some participants, environmental values are such a large part of their identity that they define themselves with reference to them; they become part of their external as well as internal selves. Jim, for example, describes himself as 'an environmentalist... I'm concerned about the environment,' and feels that his environmental values influence many of the things that he does. Jim's strong environmental values are presented clearly in his external self. Their relationship to his travel behaviour is explored in detail in Section 6.4, but here it is important to state that Jim clearly portrays himself as 'an environmentalist', through his actions, his speech, and the social groups he belongs to. Jim finds occasionally that aspects of his feelings contradict his professed environmental values, and is anxious to conceal these from some people in case they compromise his positioning with that other person.

The photograph in Figure 6.1 shows the view from the viaduct that Jim crosses to get back to the canal where his boat is moored. He likes looking at the houses and flats, particularly in the evening:

'the houses are quite nice actually... you walk along there in the evening, and there's sort of all people watching television and things in their houses... it's quite a cosy feeling, seeing people settled down there, it's quite tranquil.'

Jim feels uncomfortable with the pleasure that he gets from looking at the houses as he passes.

'I'm an environmentalist... and concerned about the environment, and it was a load of fields, which they've destroyed by building houses on it. But if I'm honest, it's quite nice how they've done it really, the houses are quite nice... but maybe I shouldn't really have approved of it in a way.... Presumably those fields were a habitat or various animals that can't live there anymore.'



Figure 6.1 Jim's view from the viaduct

Jim justifies to himself that 'gardens are apparently better habitats for a lot of animals than fields are,' but he still does not feel comfortable with the fact that he enjoys looking at the houses. So Jim's environmental values are strong and prominent within both his internal and external selves, and when they occasionally come into conflict with his feelings, he feels uncomfortable and tries to justify his feelings in terms of his values.

In a similar way, Amanda's environmental values have a prominent position within her identity, and affect every aspect of her behaviour.

'I think constantly, every day I think about every single action that I take, and whether I could be taking that action in a more environmentally friendly way.... I feel really strongly about climate change... believe in that my ecological footprint has got to be really small, trying to check that I'm not really slipping.'

Amanda's habit of constantly checking her behaviour can lead to high levels of guilt when she does not live up to the ideals she feels she should do.

'There's things that I feel bad about, like forgetting to take a bag with me and getting a plastic bag, and my son's doing a project on whales and found out this whale's just died because it's filter fed 300 kilos... and my son's sort of sitting there crying, and I'm like, god, I feel terrible... we shouldn't have any plastic bags in the house.'

For some participants, then, environmental values are such a significant aspect of the internal self that they are referred to constantly throughout the day, and play a key role both in the presentation of the external self, and in shaping behaviour of all kinds.

For other people, environmental values play a key role in the internal self, but they are not as all pervasive as other aspects of identity, and do not necessarily have the same influence on behaviour. For example, John is very knowledgeable about environmental issues, and is 'concerned about the environment.' He 'does all the things you're supposed to,'

'with energy saving light bulbs, lagged the loft... recycle, grow my own food where I can, use a bike, don't drive very often at all.'

John's environmental values are an important aspect of his internal self, and of his work as a transport planner, but he does not define himself in terms of them, as Jim and Amanda do, for example. It is perhaps the case that John seeks to minimise the extent to which his values form an important part of his identity, saying, for example,

'I'm always very careful, if it does crop up in conversation about why haven't you got a car, I'm very careful to play it down as not being a moral stance or anything, which it's not, it's just a lifestyle choice.'

While John's environmental values are an important aspect of his internal self, and while they do have a strong influence on some aspects of his behaviour, he is wary of defining himself according to them, and they therefore play a much smaller role in his external self than for Amanda and Jim, for example.

John's example demonstrates how environmental values can be an important aspect of the internal self, but played out very little in the external self. They can also have a variable impact on behaviour, and sometimes, within the same person, environmental values influence different types of behaviour to a greater or lesser degree. Ingebjorg, for example, buys

organic food and toiletries because she is concerned about the effect of chemicals on her children, but this is more from concern about health, rather the environment. Emma is also a good example. She likes it when she is environmentally friendly, but will not make decisions based on it. For her it is a question of balance.

‘When you’re really, really busy, and when your job is such a huge part of your life, it’s just as important for it to be convenient to you, for your own mental health, as it is to be environmentally friendly for your physical health. Because I think my physical health would deteriorate if I was putting a load of pressure on myself to be environmentally friendly.’

There is a strong suggestion here that, for those people for whom environmental values are an important, but not fundamental, aspect of the internal self, individuals balance and negotiate the extent to which those values shape their behaviour in any given situation. Sometimes health is the most important consideration, sometimes time and convenience. However, for those people for whom environmental values are extremely significant aspects of their internal self, the negotiation occurs in the behaviour – how can I do this in the most environmentally friendly way?

The way in which environmental values are part of identity can change over time. For example, when Jim was younger, he was committed to ‘a sort of trying to raise awareness idea,’

‘people had heard of something called global warming, but it wasn’t really real to them, and [we were] trying to point out exactly what it was.’

Jim believes that ‘there’s no point telling people’ any more, since

‘every time you put the television on or anything there’s stuff about global warming... we’ve got to the stage now where even George Bush says he believes in it.’

Jim’s ‘job as an environmentalist, if you like, is finished,’ and so he has moved onto the next stage of action – ‘I can relax now really and just change my own lifestyle!’ In a similar change, Paul considers his environmental values to be still developing. His associations with the Green Party have strengthened over time, and he is starting to examine some of his own behaviour which he had thought he could not change, such as flying. Overall, however, he describes himself as an ‘average bloke’, and his environmental values are often overshadowed by higher priorities, such as accessibility, visiting family, or a desire to be warm.

This section has explored the role environmental values play as part of identity for different people, and how this role can change over time. Environmental values are situated alongside a complex array of other values, any of which may be prioritised when making decisions around travel behaviour. Some of the complex issues underlying environmental values have emerged through this discussion: a sense of moral obligation towards the environment, for example, and a connection with individual health which may lead to eating organic food. Also present here are interactions with other elements of individuals' internal selves: Louise's busy disposition influences the importance she gives to environmental values, and Jim and Amanda's environmental values are so strong that they override all other aspects of their internal selves. These elements of complexity support Hobson's (2003 p107) view that simply giving information about the negative environmental effects of certain behaviours is not enough; individuals already have a sophisticated understanding of the way that environmental issues fit into their decision making.

The next section moves on to a deeper exploration of the different considerations underpinning environmental values, in order to generate further understanding of their relative importance within identity, and the way that they shape travel behaviour.

6.3 Value orientations

A variety of motivations behind environmental values were expressed by the participants, ranging from a personal, health-related desire to use less chemicals on and in the body, to a concern for future generations, to a feeling of being part of nature itself. These reasons correlate with Stern et al's (1993, p326) value orientations, the 'most frequently noted in the Western literature on environmental concern': (1) biospheric, or in the interests of the biosphere; (2) social altruistic, or concern for other people; and (3) egoistic, or self interested. This section will examine the participants' environmental values in the context of Stern's value orientations to explore the differences in the ways that values are underpinned, and to foreshadow later discussions around how values relate to action. The orientations are not intended to be exclusive categories, and the discussion below demonstrates that boundaries between them are blurred, and highlights some weaknesses in this conceptualisation.

6.3.1 Biospheric value orientation, or feeling part of nature.

The biospheric value orientation is that most closely associated with the work of 'deep ecologists', an orientation towards 'the welfare of *nonhuman* species or the biosphere itself' (Stern et al, 1993, p325). This value orientation is demonstrated clearly by Jim. Jim has 'always loved nature', and feels 'in tune with, a part of nature.' This stems from when he was a child:

'I spent a lot of time when I was little on my own, in places that were amazing to me, like Delamere Forest... or the hills... and to be in a forest on your own is a wonderful feeling... you look at one leaf, and it can have all kinds of different funguses on it, and little mites running round on it, who've got their own lives, and... I challenge anyone to really look at an insect and not notice that... they have got intelligence of some sort, they do experience the world, maybe very differently than we do, but they're going round living and feeling and thinking something.'

This sense of wonder and awe of nature is an inherent part of Jim's internal self, and he identifies himself as part of nature, as an animal, 'the same as other animals.' Jim's identification of himself as 'an environmentalist' is inextricably tied to these occurrent experiences as a child, of 'spending hours pond dipping, just looking for this other world, this other universe.'

Jim dates the start of his environmentalism to moving away from his parents' home to a large town, where he became involved in wildlife groups, 'where you went out with a group of people to look at bats.' At one of these groups, he met a Greenpeace member, and this led to him becoming involved with the Green Party, and then later becoming 'very heavily involved in campaigning with rainforest campaign groups.' His focus throughout was on wildlife, on nature, and he describes how he became 'a bit notorious' in the local area because he had 'save the rainforest' written on his house.

Jim's environmental values and identity as an environmentalist are complex. He does not want to be part of

'the way that sort of capitalism... is sort of spreading, is a bit like a tumour. It's not human beings, you know, we're animals, the same as other animals and plants and things, but it's this uncontrolled way that a particular type of activity is growing and spreading and eating up the planet.'

Despite his attempts to change the environmentally destructive behaviour of other people, Jim's overall view of nature is of its resilience:

'we can do a lot of damage by making things extinct, but nature overall is far bigger than us, we're just a little bit of it.'

He describes how some other environmentalists are 'environmentalists because they're worried we're going to make ourselves extinct', but this is not his personal motive. He is acting from a sense of a kind of altruism towards nature, because of the damage that human activity can do to nature, even though he believes that nature will ultimately be resilient in the end.

Jim's link between his environmental values and behaviour supports the view that increasing environmental awareness leads to an increase in behaviour. However, it is not as simplistic as this. To some extent, Jim does possess the sense of altruism that Kaplan (2000, p492) argues are the foundation of assumptions of the link between environmental values and pro-environmental behaviour. However, Jim does not fit the stereotype of the 'dour environmentalist' Kaplan (2000, p495) identifies as being part of the assumption of altruism. His behaviour stems from a sense of wonder and awe at nature, a connection with the world around him, that other participants do not appear to possess in the same way. This perhaps accounts for the significant role Jim's environmental values play in shaping his identity, and influencing his travel behaviour.

The biospheric value orientation can also be observed in Amanda, and her environmental values have an equally prominent position in both her internal and external selves. Amanda identifies herself as 'a climate change nerd', although this has not always been the case for her. As a child she had no awareness of environmental issues, although was always interested in insects and wildlife, and her mum was very knowledgeable about plants and birds. Amanda remembers being astonished when she 'found out that most people at school didn't even know what a baby blackbird looked like!' She had thought everyone's mums knew about nature.

Amanda campaigns and alters her own behaviour daily to deal with the environmental issues she is so concerned about, but does not see this as having as close an association with her value of nature as there used to be. She describes a specific example:

'they're going to cut down some willows on this island... I've heard they're diseased so they might fall down and kill somebody, so I'm actually quite happy to get them cut down, which is awful! The old

me would have gone, you can't cut those down! Look at all the animals that you're killing!

Amanda feels that she has developed a more sophisticated point of view about nature and ecology. She initially intended to take a zoology degree, 'to do animals rather than environmental things'. However, she did not get the required A Level results to take the course, and came to question the 'point of saving pandas if you're going to put them all in a zoo and then do artificial insemination because it's just meaningless.' Instead, Amanda began to

'do environmental science and actually do something about saving some of these animals, but in a proper way rather than this kind of crap "let's save two and put them in a zoo"'

So Amanda gained a degree in ecology, and a more holistic viewpoint based around saving ecosystems, 'an entire forest, and making all those people living in that forest keep living in a sustainable way' rather than saving individual animals. She now believes that

'there's an obvious link, isn't there, with the way that you protect habitat by living a less complicated life, well, in a spiritual way, a more meaningful life, but in reality a less pesticide induced, less packaged, less processed life, not just food, but transport, not racing around all over the place, buying lots of tat, it's all linked.'

So Amanda does not feel a part of nature in the same way as Jim, although she does 'put food out for birds, and [tries] too look at different types of birds that are there, and I wouldn't put any pesticides down, and we have a bee thing for bees.' Both value nature for itself, rather than for its uses for humans, and both have spent time campaigning to change people's behaviour in relation to environmental issues, as well as considering their own lifestyles.

Jim's environmental values are strong, a prominent part of his internal self, and influenced significantly by childhood memories and experiences which gave him an appreciation of the value of nature for itself. This is also the case for Amanda, who was given an appreciation for the natural world by her mother as a young child. Both Jim and Amanda developed a more general campaigning interest as they grew older, with the influence of other people in particular, but both still retain that inherent appreciation of nature, particularly Jim. Both Amanda and Jim portray their environmental values very strongly in their external selves, positioning themselves, and desiring to be positioned by others, on the basis of them.

A biospheric value orientation for both Jim and Amanda is linked to positive childhood experiences of connection with nature, of knowledge about the natural world instilled by their parents and their own explorations. This knowledge and values have carried through both Jim's and Amanda's adult lives and influence their behaviour in a significant way. While the emphasis of both Jim's and Amanda's values shifted towards campaigning, the underlying orientation of appreciation of nature for its own sake remained constant.

6.3.2 Social altruistic value orientation, or looking out for other generations

A purely social altruistic value orientation indicates that 'an individual would bear personal costs to safeguard the environment only when doing so would protect other human beings' (Stern et al, 1993, p327). People with this value orientation are likely to be concerned about the effects of pollution on innocent people, for example, and to also be concerned about other issues, such as poverty (ibid). This value orientation can be observed in several of the participants, particularly those with children. For example, Ingebjorg's environmental values are linked directly to her role as a parent, being based around concern for the effects of various chemicals on the health of her children which may affect their ability to have their own children in the future:

'it's not good for your kids to put this stuff in their body and then they won't be able to get kids, all this threatening stuff around the hormone disturbing stuff.'

She is careful to buy organic foods and cleaning products, as well as toiletries such as shampoo, again because of the health of her children – 'it would be really sad for them... to have filled them with all kinds of stuff that made it impossible for them to have kids themselves.'

Ingebjorg's value orientation has shifted over time. As a teenager, she 'had to save the world, and the other teenage stuff.' Her friends did 'good stuff for the environment' and Ingebjorg speculates that 'maybe it's the teen mentality.' In addition, 'Greenpeace and other organisations like that were clearer in the picture' and this influenced the views of Ingebjorg and her friends. They felt they had to 'buy shampoos that wouldn't do bad stuff to the water.' This value orientation Ingebjorg had as a teenager is biospheric, and similar to that of Amanda and Jim as described above.

As Ingebjorg got older, her actions have remained similar, but the value orientation underpinning them has changed:

'I think maybe there's a difference now because we have maybe not to buy so much the product that doesn't harm the environment, but buy the product that doesn't harm ourselves. It's like there's been this turn, that you use the shampoo that doesn't have any hormone disturbing stuff in it, not as much the environment friendly.'

Ingebjorg recognises this shift in motivation in herself and her friends, and also in the newspapers and general media in Denmark. The development of the character of her own environmental value orientations has followed that of general environmental values in Denmark, from an environmental approach, recognising the intrinsic value of the environment, to a more individualised, health based approach. This in some senses is characteristic of Stern et al's (1993) egoistic value orientation, being focused on individual health. However, Ingebjorg's primary concern seems to be for the health of her children, and their ability to produce future generations of their own children, rather than her own health, so her values are perhaps more in keeping with the social altruistic value orientation.

Lindsay shares this concern around health. She lives in a town with a large oil refinery, and at the end of her road is a 'stupid stack', which her husband explains is

'residual burn off, what they don't use when they're refining your petrol, there are things they don't need, so they just burn it up instead of storing it.'

Lindsay is concerned that this contributes to her husband's asthma, especially as he recently travelled to Cyprus on holiday and 'never used his inhalers at all, cos the air was so clean.' Lindsay's concern is that the pollution in the air where they live is causing her husband's health problems, and is confident that this is also true for other people:

'I think if you asked all the doctors, people suffer from sinuses, glue ear cos of the gunge and congestion in your ears, nose and throat. I think we're probably one of the highest places for cancer cos of all them emissions that are coming out, I'm sure we are.'

Lindsay lives in a council house in a town with several chemical factories, and this is reflected in her concern for her husband's health and the damage she perceives is done to it by the local air pollution.

This connection between health and environmental issues, particularly pollution and the use of chemicals – between 'your own environment, the

body, and also the outside environment' (Helsa) is identified by several participants in this research. Health concern, particularly in family members, are immediate, and people understandably react strongly to them.

The health connection is not the only way to interpret the social altruistic value orientation, although it appears the most prevalent in this research. John, for example, has concerns around inequality and injustice, which influence his environmental values and also his behaviour. John has 'known for many years what the risks are, the perils that we're facing' in terms of environmental issues. He had no knowledge of such matters as a young child. John's first awareness came in 1973 with the oil crisis:

'there was a lot of media attention given to environmental issues, not in terms of "we can't carry on burning oil because of the carbon dioxide", it was "we need to think about some other way of getting around if the oil's going to run out"

At this time, 'a lot of the environmental movement was beginning to make waves', and John was aware of a campaign about lead in petrol, which was affecting the health of children in a local school close to a major road. John believes he always had a 'predisposition... for rooting for the underdog' and he got involved in campaigns and protests around 'rate capping, abolition of the county councils, miners' strike, things to do with income distribution, I suppose, rather than environment.' Despite this, however, John is 'concerned about the environment' does take some steps to act in an environmentally friendly way.

John's concern is with equality, with income distribution, and while this has led him in some ways to behave in a more environmentally friendly way, this has not necessarily been his primary motivation.

6.3.3 Egoistic value orientation, or looking out for oneself

'If environmental concern' note Stern et al (1993, p326) 'were based entirely on self-interest, an individual would favour protecting the environment when and only when doing so would have expected benefits for the individual that would outweigh the expected costs'. They give the example of the 'NIMBY' protest ('not in my back yard'), where individuals oppose developments they perceive will have a negative impact on them personally. There was little demonstration of this value orientation among the participants in this research, perhaps indicative of the subject of the

research, rather than the nature of the participants themselves. Individual journeys do not cause immediately noticeable negative effects in the same way as building developments.

An element of this orientation can perhaps be witnessed in Emma's association of 'being environmentally friendly' with a deterioration in her physical and mental health, and she considers this so unacceptable that she will not go out of her way to use the train, for example, unless it is the most convenient way for her. She will recycle, as she has a doorstep collection service, but will 'never wash out a Marmite jar, I don't see the point of doing it', and she assesses each activity in terms of time and inconvenience to herself and her family. For Emma, linking environmental values to behaviour is a question of balance:

'I'm not wasteful, but I like things as I like them. I mean, I recycle stuff, I'm really quite adamant that you shouldn't throw clothes away, you should take them to the Oxfam shop and things like that, but I think, when you're really really busy, and when your job is such a huge part of your life, it's just as important for it to be convenient to you.'

6.3.4 An ethic of common sense and frugality?

There is another value orientation apparent among the participants in this research, one which does not fit neatly into Stern et al's (1993) categorisations. Louise demonstrates this when talking about sourcing locally grown food. Before the interview she had been reading a book by a school dinner lady who was 'doing all this Jamie Oliver stuff before Jamie Oliver was doing it', and how

'what she writes in the front makes perfect sense, she sources all her food locally, she has deals with local farmers and local butchers, she does her veg seasonally, so it's all fresh, she knows exactly where it's come from.'

Louise values this locally based food sourcing, because to her 'it makes perfect sense, I mean, why do you fly in stuff you can get down the road, it seems silly.' It seems irrational to Louise from an environmental point of view, a simple common sense point of view, and from the view of the local economy:

'you can be supporting your local Mr Farmer Man, with your local business, and instead he's struggling, you're paying somebody to buy it from goodness knows where, and paying goodness knows how many people to do it for you, and it just seems silly... just because we can doesn't mean we should.'

Louise feels this is going back to what people did 60 years ago, eating locally sourced and home grown food, but that in the meantime 'improvements' have actually made the situation worse. Louise's reasoning here is based on an older, rural locality ethic, perhaps close to Leopold's (1949) land ethic. It is also strongly intertwined with her own ethic of frugality, which she describes as a 'common sense' approach, of making do with what you have, and buying local food because it is nearer. It is partly about common sense, and partly about a desire to avoid waste. Louise has a relatively low income compared with other interviewees, partly because she works only an hour each day as a dinner lady at the local school so she can be at home when her daughter returns from school. This may have affected her perceptions in terms of not wanting to waste things.

Lindsay expresses similar misgivings about waste to Louise, but in relation to her own travel rather than food and food miles. She attends a large church which is around 15 minutes drive away from home, and is 'encouraged to pick other members up.' The church encourages this, because otherwise some people would not be able to attend. Lindsay also applies a similar common sense argument to Louise:

'there's no point one person taking a car with one person in it... there could be five people on the road, five cars with one person in, so we load up the car with people and one person'll take it. So then we get there and it saves the petrol, you can have a chat and it's a bit social on the way, and it's less junk in the environment.'

Lindsay provides four reasons for giving people a lift to church: (1) economy – travelling together saves fuel; (2) social – they can chat on the way; (3) altruistic – some people can get to the church that would otherwise not be able to because of poor transport links; and (4) environmental – one car is producing less pollution than five travelling separately would. Yet Lindsay speaks of this behaviour as if it is common sense, the only rational thing to do, not because of any strong environmental values.

This reasoning does not fit neatly within Stern's categorisation of biospheric, social altruistic and egoistic value orientations. In terms of support for a greener, more local economy of supporting local farmers and minimising food miles, it is arguably part of a social altruistic orientation, acting for the common good. But the elements of 'common sense' and frugality do not fit within this, yet neither are they tied to resources consciousness in an 'environmental' sense. Frugality here becomes a value

in itself, unrelated to environmental considerations, although impacting on them. This orientation perhaps combines elements of frugality, of a 'waste not, want not' approach, and of what both Lindsay and Louise describe as 'common sense' – something they both view as lacking in some elements of the modern world.

Stern's categories are helpful for unpacking the underlying orientations behind environmental values, but there are also complexities revealed which do not fit within them. Recognising the range of value orientations is important as it demonstrates the motivations behind people's environmental values, and allows a deeper exploration into the reasoning behind their actions. It also builds on the illustration developed over the course of Chapter Six of the ways environmental values are situated within identity for different people, and their potential for influencing actions.

6.4 How environmental values shape travel behaviour

The rest of this chapter explores the role of environmental values in shaping travel behaviour. Section 6.4.1 will look at people whose environmental values do influence their travel behaviour. Following this, Section 6.4.2 will discuss people whose environmental values do not affect their travel behaviour, and explore why this may be the case. Finally, Section 6.4.3 will explore whether environmental values must necessarily encourage pro-environmental travel behaviour, and look at instances when such behaviour occurs without environmental values.

6.4.1 When values influence action

Environmental values are a significant influence on travel behaviour for some participants, and it tends to be those for whom environmental values are a significant part of their identity. For example, Amanda's environmental values are an important part of her internal self, and she constantly monitors her behaviour to ensure it fits with her environmental values:

'constantly, every day I think about every single action that I take, and whether I could be taking that action in a more environmentally friendly way.'

She feels 'very strongly about stopping climate change' and believes her ecological footprint has to be really small, so is constantly checking that she is 'not really slipping.' Similarly, Jim's environmental values are strong, an important and defining part of his identity, and also have a direct and strong

influence on his travel behaviour. In particular, he directly links his love of nature to his decision never to fly:

‘I feel a sort of close connection with nature, and with other species and with trees, and by flying everywhere, I’d be destroying, or contributing in an important way to the destruction of those things that are important, that are part of me in a way.... to me, I’m part of nature, and I’d be destroying my habitat.’

Jim believes that ‘other people don’t feel this connection’, and indeed in this research at least it seems that they do not. For Jim himself, this connection came relatively late, and led to a significant shift in both his thinking and his identity for his actions to link in to his values.

As a child, Jim’s mother used to tell him ‘when you’re 17, we’ll get you a car.’ For his family, ‘it was like a big thing to look forward to for my whole life... it was like this goal, like a rite of passage.’ In fact, Jim’s parents did not buy him a car, but he did learn to drive and buy his own as soon as he was 17. He even joined ‘motor racing school... because I had ideas that I was going to be world Formula One champion or something!’ There were many things Jim loved about driving, including ‘that feeling of so much speed with so little effort’ and he often used to just ‘go for a drive’ because he enjoyed it.

When Jim was 21, he made a decision to stop driving. His involvement with wildlife and campaigning groups had increased, and he ‘came to the conclusion that car travel in particular is... ultimately a bad thing for the world’

‘not just because of... the emissions and stuff like that, but because of the way it affects people’s outlook, and because of almost the symbolic importance of cars for people.’

His growing environmental beliefs were becoming incompatible with his driving habits, and Jim decided that it was the driving that must be stopped. Jim did not at the time believe he would give up driving forever, just that ‘I’d try and stop forever and see how it goes.’ He has not driven since, and now cannot bear the thought of getting into a car.

The example of Jim giving up driving illustrates the way that identity, and environmental values as part of identity, can shift over time, and in turn, can potentially affect travel behaviour quite significantly. In Jim’s case, his interest in wildlife led to an increasing awareness of how his own behaviour

was having a detrimental effect, and this was something Jim felt was not acceptable, and so he altered his behaviour.

There is some evidence among the participants that people feel more comfortable acting in accordance with their environmental values when they are surrounded by other people who share similar values. In particular, Amanda felt so uncomfortable in her previous city because there were few other people who shared her values that she moved cities. In her old city, she was

‘on the bloody front page of the paper for having [her son] in a bike seat, so there I was this gung ho mother, you know, eco woman.’

Where Amanda lives now, she feels ‘just part of the puzzle’ because everybody behaves in a similar way, it is important to her that she is ‘not doing anything extraordinary.’ Amanda works very hard trying to live up to her ideal identity as an environmentalist, and feels that it became easier for her to do that when she moved to a community that shares her values, where she is not seen as ‘this big eco’, where her neighbours have bicycles and cycle to school with their children, as she does. These things were not necessary for Amanda to apply her environmental values to her mobility choices, but she feels very much more comfortable now that she has that community around her. Amanda believes that her area ‘makes me feel safe because I’m surrounded by people that I get on really well with and have the same values as I do.’

There are several ‘really good organisations, the really radical green organisations’ based in Amanda’s new city, some of which Amanda occasionally does voluntary work for. She believes there is also an issue around cycling with children, for example, becoming safer the more people do it, the more it is seen as mainstream and not unusual, the more people will consider it. Here, she sees ‘loads of people with a couple of kids, one on a trailer bike and one on a bike, or one on a baby seat and one on a trailer bike on the back of the baby seat’ and this gives her hope, and, she feels deprives people of their excuses that they cannot cycle with two children or even one child – ‘people with one kid have got no excuse.’

There is a general point to make here about the act of positioning oneself in relation to other people. Participants whose environmental values are a significant part of their identity tend to present those values to others as part of their external selves. In some cases, the presentation of a specific

self, accompanied by a self-professed label, for example 'environmentalist', can become associated with a set of stereotypical behaviours by people surrounding the individual, who then expect them to behave in a particular way. For example, Amanda admits to raising her children to 'hate 4x4s', and she is quite vocal about this. In response, one of her friends recently told her that

'they do feel guilty when they drive down to school and they don't let their children wave at me... cos they think I'll see them and be cross with them cos they're driving! I probably shouldn't have said that out loud because I feel bad about that...'

Amanda's friend perceives Amanda's own positioning as 'an environmentalist', and then makes an assumption that Amanda will disapprove of her friend's behaviour because of her values. So the friend avoids Amanda, having positioned herself as 'not an environmentalist'. In a similar way, Jim hides the fact that he enjoys watching Formula One motor racing, because he feels this is not compatible with his projected 'environmentalist' identity.

6.4.2 When values do not influence action

Environmental values do not always influence actions around environmentally significant behaviour, showing how this research supports previous work (see, for example, Demos/ Green Alliance, 2003, p47). For example, Emma finds that 'it's reasonably nice to be environmentally friendly', but is adamant that although

'it pleases me when I'm travelling in a way that's environmentally friendly, I certainly wouldn't choose my transportation based on that principle.'

In a similar way, Lindsay feels she would in other circumstances use public transport, but in her present situation, it is not an option:

'If our government would get itself in order, and we had a decent railway system or a decent bus system, running efficiently and on time and went everywhere, then I certainly wouldn't have a car... we'd just go public.'

Lindsay does not do this, however, because she feels she would 'never get there, I just need my car to get me here, there and everywhere, because I'm busy.' Lindsay has travelled by train in France and Switzerland, and admires the system there:

'the train was waiting there for us, and they're clean, they were spotless, and they were double decker trains, brilliant, real posh seats, and no one was sitting there with their feet up and no litter, and no graffiti and it was just so clean and so nice!'

If trains were like this near her, Lindsay believes she would not need a car at all. However, until the government provides such a system, Lindsay will not use public transport on a regular basis.

There are two significant issues here. One is a question of balance, of the negotiation of priorities between environmental values and other aspects of life and identity. The other issue is around questions of responsibility and efficacy, about who *should* do something about environmental problems, and whether taking action will have any effect. Both contribute to the participants seeming to act in opposition to their environmental values on occasion.

All of the participants expressed some environmental values, but for many, these did not directly influence travel behaviour. Some participants expressed regret, or guilt about this, but had other priorities which they considered more important. These were varied, and will be discussed in more detail throughout Chapters Seven and Eight, but they broadly encompass issues around having limited time; not feeling safe using public transport, particularly at night; and feeling that choosing an environmentally friendly option would have a detrimental effect on their mental health by causing them to be more stressed. For example, Louise often finds that she is so 'disorganised', so 'chaotic', and tends 'to volunteer to do more than I can probably handle', that she has to drive in order to get to all her appointments, even if they are not very far away.

On occasion, feelings of powerlessness may lead to an individual being reluctant to take actions that fit with their environmental values. Perceptions of powerlessness can be linked to a belief in the individual's own lack of efficacy, feelings that a problem is too big for them to solve, or to feelings that the responsibility for solving the problem lies elsewhere, for example with the state (Bradley, 2009). For example, Lindsay feels little sense of personal responsibility for the environmental problems caused by transport, and feels instead that it is the government's responsibility to provide an efficient and desirable public transport system.

By contrast, John is 'concerned about the environment', and 'feel[s] some moral responsibility to do something' about 'the perils we're facing' around environmental issues. He 'does all the things you're supposed to' like insulating the loft, growing some of his own food, and using energy saving light bulbs. Both Amanda and Jim feel strong personal responsibility, and for both of them this leads to a combination of action in their own lifestyles and campaigning to pressure changes in government.

Louise is also aware of environmental issues, and believes 'you can't possibly be ignorant about it.' She believes it is 'up to us to do it' if not for ourselves then for future generations – 'we might as well start making changes now while we can, and they're only quite small changes aren't they?' For Louise, 'the things we do do make a difference,' and this feeling does have an impact on Louise's behaviour. She recently bought two large water butts, for example, and makes an effort to reduce the water consumption in her garden by using water from these to water her plants.

It is clear, then, that environmental values must be coupled with a sense of both responsibility and efficacy in order for them to significantly impact on behaviour – individuals must believe that they both can make a difference, and have a responsibility to, in order to act. Feelings of personal responsibility can shape whether or not environmental values influence action. Feeling convinced of the efficacy of one's actions is a powerful motivator. Conversely, if individual actions are perceived to change nothing, or there is a strong presumption that government or business has the responsibility to change first, values are less likely to influence behaviour. Feelings of responsibility are linked with identity in a number of ways. Aspects of an individual's internal self including disposition, memories, previous experiences of changes can all influence a person's sense of responsibility, as can interaction with other people who may impart their own views. However, environmental values may still be overridden by other considerations, as in Louise's case, limiting the effect on action.

6.4.3 Actions without values

Emphasis in policy making has been placed on changing environmental values as a way to change behaviour. However, as discussed in Chapter Two, this often does not work, whether because values are not a significant enough aspect of identity to have a large impact on an important behaviour

such as transport, or because other aspects of identity are given prominence. These other aspects will be discussed in the following two chapters. This next section presents evidence from the research suggesting that environmentally friendly travel behaviour is not necessarily underpinned by a base of environmental values.

As an example, John's mobility practices are very environmentally friendly; he has no car, and cycles or walks for most of his journeys. However, he is keen to point out that this is largely not for environmental reasons. John did not cycle between his childhood and when he was 30 years old. This was mostly because of 'the cheap fares policy, it was ten pence to go anywhere on the bus, so I did most of my journeys by bus.' The cheap bus fares policy was abolished, however, and this outside influence changed John's transport habits considerably. John considered the increased cost of travelling by bus, thought 'I'm not paying that!' and so bought a bike.

'So initially the reason I took up cycling was financial, it paid for itself in the first summer. There was a little bit of, oh, I'll get some exercise, and I suppose in a very low third was, it's green.'

So John clearly sets out his prioritisation for starting to cycle as 'money, fitness, and then green.' His reasons for continuing cycling are slightly different:

'I get a buzz out of going under my own steam... not having to plan the journey in terms of finding out what time the next bus is, or where to park.... It's free [to park] and as long as you're careful where you put it, it's going to be there when you come back.'

John's reasons for cycling now may be different to when he started, but he is still adamant that his cycling is not a result of his values. He is 'always very careful if it crops up in conversation' about why he does not own a car,

'to play it down as not being a moral stance or anything, which it isn't anyway, it's just a lifestyle choice, I'm not preaching to people that they shouldn't have one.'

In a similar way, Andrew often cycles to school with his three young daughters, but their primary motivations are speed and not being stuck in rush hour traffic; the flexibility of being able to take a direct route and 'zip through the little maze of streets'; and then lesser issues of exercise, and the lack of environmental impact.

Does it matter that these environmentally friendly behaviours are not directly motivated by environmental values? Perhaps a financial motivation

would matter if another mode of transport became cheaper than cycling, for example, and both Andrew and John might switch to this instead. However, this is an important issue for those encouraging pro-environmental travel behaviour to note. Both John and Andrew, as well as other participants, take pro-environmental actions in other areas of their lives, and although not motivated by this, the limited environmental impact of their travel behaviour is pleasing to them. An emphasis on the other benefits of pro-environmental travel behaviour, such as financial, or health, might prove encouraging to those not motivated by environmental values alone.

It is also significant to note that some participants took action to reduce the environmental impact of their travel behaviour without it being motivated by values, and without them switching to an 'environmentally friendly' travel mode such as cycling. For example, Section 6.3.4 set out how both Louise and Lindsay often share cars with others, for a variety of reasons, ranging from what they both see as 'common sense', through to reducing environmental impact, and allowing people access to an event or group they otherwise would not be able to access because of lack of transport.

Perhaps the emphasis should be on recognising that travelling is an environmentally significant behaviour, and that the issue is around *impact* rather than *intention*. While in some people the intention is strong enough to change the behaviour and therefore override the impact, in others it needs to be easy for them to change their behaviour, and finally in some cases so easy that the behaviour happens even without the intention.

6.5 Conclusions

This chapter has explored the role that environmental values play in shaping travel behaviour for individuals. It has explored the different orientations of environmental values, suggesting that those whose environmental values were focused around nature tended to be more likely to let their environmental values shape their travel behaviour. This is not always the case, however, and the chapter outlined the importance of recognising the role of an ethic of frugality and 'common sense' in reducing the environmental impact of travel behaviour.

Whether environmental values influence travel behaviour depends on a number of factors, not least feelings of responsibility that people hold, and

negotiations both internally between environmental values and other priorities, and externally between individuals and their family, friends, and other commitments. This will be explored in further detail in Chapters Seven and Eight. This chapter emphasised the importance of the role of other people, both in increasing knowledge and shaping environmental values, but also in encouraging environmentally friendly actions, and making people more comfortable to act in accordance with their values.

7. Place

7.1 Introduction

Throughout the research, participants continually raised issues around the places they lived in, travelled to, and travelled through. These issues ranged from why they lived in a particular place and the consequences of living there for their travel behaviour, to the characteristics of the places they travelled to and through, and why they were considered to be important. These issues, in part, echo the questions raised by Hagman (2004, p1) about the way that people inhabit places:

‘Why do they live there and how do they organise their lives from there? What other places do they need to visit or communicate with in other ways? How do they choose between the different means of transportation or communication available? How do they look upon the place in relation to other places?’

The answers involve a complex interweaving of the internal and external selves, and the social and physical worlds. Urban structure is significant in a number of ways in determining the way people travel (Naess and Jensen, 2004). Questions arise about the physicality of both people and the places they inhabit, as well as the role that other people play in creating places, and emotions that particular places give rise to, and these questions shape the structure of this chapter.

Section 7.2 will explore how the physical realities of both people and the places they inhabit shape travel behaviour, both in terms of where people choose to go, and can go. The physical embodiment of individuals, Harré’s Self 1, is discussed here, both in terms of disability, and physical fitness. The physical structure of places themselves is explored here too, with participants raising issues around infrastructure as a barrier to cycling in particular, as well as the inability of some places to meet needs, and the resultant impact on travel behaviour.

Section 7.3 discusses the more ephemeral nature of people’s interactions with place, the feelings they experience in places, and the role of other people and the places themselves in shaping those feelings, as well as the stronger, more durable, emotional attachments people have to specific places, and the role of these in shaping their travel behaviour.

The chapter as a whole focuses on the relationship between identity and material and social structures, and the role this relationship plays in shaping travel behaviour.

7.2 Physical reality and the relationship with place

Harré's Self 1 is 'the singularity of an embodied point of view' (2001, p60). It is the self of *physical embodiment*, and refers to an individual possessing one body, being only in one place at a time, and being a continuous person throughout the life course. This physical embodiment necessarily leads to interaction with both the physical and social environments. The nature of these interactions is shaped by the physicality of the individual themselves, as well as characteristics of the environment itself. This section deals with this relationship.

7.2.1 Physical traits

Two aspects of physical embodiment in particular arose in this research: disability and physical fitness. Fitness, or rather a lack of it, was raised as a reason for not using more active modes of transport such as walking and cycling. One participant, Paul, has a physical disability and uses a wheelchair, and while his experiences were unique among the participants, they illustrate clearly the reciprocal interaction between individuals and their physical surroundings in particular.

Part of a series of physical traits, a person's body and ability to move is an objective reality of the individual's physical embodiment. The extent to which this body is constrained in its movement through place is controlled by the social norms governing the creation of physical and social reality in the form of street layout and dropped pavements, for example, and what is considered to be 'normal' bodily movement and ability (Dear et al, 1997). The bodily realities inherent in the internal self combine with the external environment to influence freedom of movement and travel decisions. The dependent relationship between travel and physical traits is most clearly visible through the limited mobility caused by physical disability.

Physical disability is both socially and physically produced (Imrie, 1996), and an understanding of how disability influences interaction with place and impacts on mobility practices can be gained by looking at disability as an experience of both the internal and external selves. Paul cannot walk, has

very limited use of his arms, and uses an electric wheelchair to move around, and also needs a carer to travel with him. He lives alone in a flat in a supported living scheme, and has carers visit several times each day. His travel choices are limited by his restricted movement, which influences the way he can interact with place. For example, Paul regularly makes a journey into the town centre across the bridge shown in the photograph in Figure 5.2.

‘this is the bridge I normally cross to go into town, partly cos it’s got a nice ramp and it’s smooth, and it just takes me straight on my path... I could carry on along the towpath... partly I don’t do that because it’s a bit windy, a bit longer, and also to get from there to the bits of town I want to go to, the journey is more up and down kerbs, and also there’s cobbled stones as well, so I normally sort of avoid cobbles.’

Although not a significant negative impact on this journey, the decisions Paul makes about which route to take into town are shaped by the fact that it is easier for him to move through the physical environment in some places than others. Paul is fortunate that he lives close to a bridge with a ramp, but this route into town is partly what influenced his decision to live where he does. Paul also influences the shaping of the physical environment to increase accessibility, such as the occasion when he ‘ranted at the Council and they put the drop kerb in’. This is an iterative process, whereby Paul’s internal self shapes the way he interacts with the physical environment, which in itself is shaped by social factors, including Paul’s request to the local authority that they shape the physical environment in a way that suits him, as well as others who may benefit from this physical feature.

Paul’s ability to use public transport is also influenced by his physical disability.

‘I don’t use the buses at all really, cos they’re just too crowded... some buses have got wheelchair spaces, but for me they’re just too small, there’s no clamping system, in my van I can be clamped down so the chair doesn’t move, I’ve got a seatbelt also, there’s a grab rail on the bus, but I can’t grab the rail, so it’s just no use to me.’

It is not only Paul’s disability which contributes to his discomfort when using buses, but also his height. Paul is rather tall, and because of his height, his wheelchair takes up more room than an average wheelchair, and this

means Paul feels he cannot comfortably fit into the wheelchair space on most buses.

Some of Paul's difficulties in using public transport are grounded in his physical traits and the fact that he must use an electric wheelchair. However, to some extent, other aspects of Paul's internal self come into play here, with previous negative experiences influencing his desire not to use various modes of public transport.

'trains, also, I don't use, because you've got to book [assistance].... and also my images of trains are from the old days, where I used to go in the guards van... I couldn't get into most carriages, just the guards van.'

Paul also describes an experience when he had booked assistance in advance, but when the train reached their destination, there was no guard and no ramp to greet them, and on another occasion the train started moving while he was on the ramp - 'I've not had a great lot of fun on trains!'

These experiences of the interrelationship between Paul's internal self and the external physical and social environment combine to constrain Paul's transport choices to either his wheelchair or his van, which is driven by a carer. This engenders contradictions between Paul's environmental values and his travel behaviour. Paul attempts to counteract these by altering his behaviour in other areas of his life, such as recycling, and his mobility, by limiting his foreign holidays each year, for example, to a trip to visit his father in Jamaica. These self imposed limitations are a new addition to Paul, and restrict an important area of his life.

Paul's previous negative experiences have been partly due to his disability, but the way those experiences have become part of his internal self and shape his future decisions is the same as for other people who have had negative experiences on public transport. The mechanism remains the same – negative experiences, whether caused by physical traits, or the fact that the physical environment is not adequately adapted, or anything else, are stored as part of the internal self, and a desire not to repeat them influences future travel choices.

Other than in relation to disability, physical interaction with place affects travel behaviour, perhaps most visibly in relation to active transport. There are two interrelated aspects to this: an element of the internal self in terms of feeling fit enough to cycle, and characteristics of the external, physical

environment, which influence aspects of the internal self. Characteristics of the physical environment itself which may limit the use of more active modes of transport will be discussed in Section 7.2.2.

Those participants who cycle regularly particularly appreciate the fitness aspect of this. For example, Donald, who is seventy years old, is proud of how far he cycles:

'I actually keep fit, I don't cycle casually, leisurely, I cycle reasonably fast, because I've got a speedo and I know what my speed is, I know how far I've gone, and that keeps... my mind on, you know, accumulating. I'm up to sixteen and a half thousand miles!'

Andrew, with three young children, appreciates the opportunity that cycling gives him and his wife to exercise without taking time out of their normal daily routines:

'it keeps us relatively fit, which, particularly having small kids is not particularly easy. I mean, probably, if people are in one particular sport or exercise regime, it's quite easy to keep fit in your own time. But... if you've got little kids it's harder, so it's really about the only reliable form of exercise we get, so that's a positive for us.'

Perception of fitness often seems to stem from internal physical realities and a perception that the physical environment is difficult to negotiate, whether because of topography or the amount of traffic. John, who is a transport planner and also a keen cyclist, believes that it is a misconception to think that the hilliness of a place in itself is a barrier to cycling, as is often perceived to be the case. It is instead, John suggests, 'topography combined with a more sedentary lifestyle' that is the problem. In his own experience as a transport planner of encouraging other people to cycle, John has found that

'people have become generally less fit, and that becomes an additional barrier to taking up cycling. We've found that people overcome that barrier... found it difficult at first but then persevered, it ceased to be a problem, but initially it's a problem and people give up.'

John believes that people perceive their levels of fitness as absolute – they cannot cycle because they are not fit enough, without a recognition that they can improve their fitness. This perception of fitness as an unchanging physical trait is perhaps, as John suggests, linked to a combination of topography and a sedentary lifestyle, as well as perhaps a fear of the unknown.

7.2.2 Infrastructure and traffic as barriers

The physical environment was raised as an issue by participants most often in relation to cycling, both by those who did and do not cycle regularly. The physical realities of road layout and infrastructure as well as increasing levels of traffic combine to pose a significant threat and barrier to cycling. Conflicting interests between road users are inevitable, although some mitigation can be achieved through the provision of adequate facilities for all road users. However, cost combined with the social reality of cycling being perceived as a minority activity ensure that adequate facilities are often not provided, leading to inconvenient or dangerous situations for cyclists. Donald's photograph in Figure 7.1 demonstrates how a misguided attempt to prevent motorcyclists from using a canal towpath has removed a lot of the pleasure and convenience of the path for pedal cyclists.

These conflicting interests between road users illustrate how interaction with other people within a place can become an inherent part of interaction with the place itself. Traffic consists of individual people travelling from one place to another, usually using motorised transport, but 'traffic' in general also fundamentally alters the character of a place, making it seem



unappealing, dirty or dangerous. This in turn is internalised as negative experiences and creates a psychological barrier to cycling.

There are both real and perceived dangers from traffic to cyclists, and perceived dangers vary between individuals, as well as for individuals in differing circumstances. Other road users, primarily

Figure 7.1 Donald's photograph of barriers along a cycle path

people driving cars, are the main cause of actual danger from traffic, whether that is through irresponsible driving, or opening car doors as someone cycles past, for example. John describes a fairly typical, low speed encounter with a car:

‘earlier this year, chap was turning right in his car, into one of the car dealerships, wasn’t looking... his focus was on where he was going in the dealership, and he clipped my back end and knocked me off.’

Amanda had a similar experience when she first started cycling to college as a teenager:

‘within the first month someone cut me up, and I got knocked off, nearly killed!’

Collisions with cars appear to not be too unusual for cyclists. The level of perceived danger among the participants tended to be higher, however, for those participants who did not cycle regularly. It is impossible to tell from this research whether those who do cycle regularly have a more realistic perception of the dangers, or are sufficiently motivated by other factors to cycle that they simply regard the dangers as less important – possibly both.

The extent to which past negative experience, particularly when cycling, influences future behaviour is not predictable, but rather depends on an individual’s values and disposition, as well as the incident itself, and other elements of their interaction with their social group. Amanda and John, for example, have both been knocked off their bicycles by cars, and both remain keen cyclists. However, both have strong feelings about cycling, and cycling is a significant part of identity for each of them, so they both became angry at their respective incidents, but it did not discourage them from cycling. Amanda was injured in her accident – ‘I still get a bad back because of it, I get numb bits in my hip.’ She was angry with the driver ‘because the bastard had got away with it and I didn’t see who it was’, but the bulk of her anger was directed towards the local authority:

‘I’d never been to the council, I didn’t even know how to do it, but I just saw a council building, and I suddenly got stroppy about it! And I said, why haven’t you got cycle lanes? And they said, well, we’re looking at Nottingham as an example, and they showed me, and I said no! That’s rubbish! You haven’t got anything at the front of the traffic lights so the bikes get to go in front, cos bikes take longer to speed up.’

Amanda feels that this incident was why she ‘became a bit political’.

John has been knocked off his bike three times in his twenty years of cycling, which he considers to be fairly reasonable – ‘the worst I’ve had is a graze on me hand and a bruised bum, so that’s not too bad.’ His injuries have not discouraged him from cycling, although he does feel some vulnerability when cycling on occasion:

‘there are odd incidents that do make me feel uncomfortable, that do make me feel vulnerable, but the general experience of it is, no, it’s fine.... Most journeys go by without incident... or anything where I feel like I’m anything other than just a normal part of the traffic. The ones where something does happen, where you feel somebody obviously feels some animosity towards you, you just wonder why, then you feel a bit isolated, feel as if you’re sort of outside the mainstream.’

John’s discomfort stems from a feeling of ‘otherness’, of not belonging to the dominant social group of motorists. His physical vulnerability as a cyclist surrounded by cars is emphasised when a driver ‘does something deliberate’ which is aimed to hurt him, even if it does not. At such times, John feels more ‘isolated’ from the mainstream social group than ever.

These feelings of isolation and a desire to blend in cause John to wear a grey waterproof cycling jacket, which ‘looks very ordinary.’ Although John is a keen cyclist and has cycling promotion as a key part of his job as a transport planner, he does not want to appear to be a ‘cyclist’.

‘[wearing a fluorescent jacket] just singles me out as being different to everybody else... it identifies me as a cyclist rather than being me, who happens to ride a bike. It’s like wearing a badge that said... I love Motorhead or whatever, you’re saying something about yourself to people, and I think that wearing obvious cycling gear is saying, you know, I’m different to you.... And in a society where... it’s a relative minority activity... not wanting to be identified by one particular characteristic, you know, there’s more to me than being a cyclist... I’m all sorts of other things as well, and I don’t want that to be the only thing people think of me as.’

John consciously manipulates his external self to avoid being positioned as a cyclist in a social world where cycling is a minority activity, despite the fact that he feels strongly about cycling, and is a keen cyclist himself. The negative stereotypes that he assumes others will associate with the ‘cyclist’ label cause John to go to some lengths to avoid others positioning him as a member of that group with the attached connotations. John, as a cyclist, feels threatened when he is positioned as unusual, as out of the ordinary, and therefore consciously desires to position himself as part of the mainstream, or at the very least to not portray such an evocative symbol as

a fluorescent cycling jacket which would immediately cause others to position him as a 'cyclist'. John knows his internal self to be complex, and does not wish his external self to portray an image of him based on only one characteristic of his internal self, particularly when that characteristic would see him positioned outside the mainstream.

John's situation illustrates the complexity of the relationships between the internal and external selves, and between individuals and the physical and social world. Questions are raised about which aspects of the internal self should be portrayed in a given situation. Often, other people make presumptions on the basis of outward signs that are not as consciously portrayed as John's 'ordinary' cycling jacket; others do not always perceive us as we would wish. The fear that people may have of being associated with the negative stereotypes of the 'cyclist' is clearly identified by Horton (2007).

John's experience is also linked to the social environment he cycles in. He feels unusual as a cyclist within his city, which does not have high levels of cycling. This feeling of otherness was echoed by Amanda, who chose to move cities to somewhere where her values would be shared, and where she would not stand out as much. Similarly, Andrew feels safer when cycling because there are many other cyclists in his city, so drivers are used to them.

7.2.3 Places meeting needs

One of Hagman's (2004, p1) questions about the way people inhabit places is 'what other places do [people] need to visit or communicate with in other ways?' The question of why to travel is one that was answered in several forms by the participants, with one of the most common answers being to meet needs that could not be met in the place people lived. A significant functional journey talked about by participants was the journey to buy food. These journeys varied according to location and mode of transport used, but together the issues raised by participants in relation to this particular journey illustrate both the importance and complexity of the relation between place, travel behaviour and identity.

Decisions about how to travel are framed within the context of where to travel to, and the purpose of the journey itself. These elements will each impact on the decision about how to travel. The decision about where to

travel to must be made within an understanding of the resources available in each place, for example leisure facilities, food shops, or friends, and whether these resources are available or not shapes, and is shaped by, both identity and travel choices.

For example, Louise lives near to a small street of local shops, which she refers to as 'the village', although it is no longer actually a village, but rather a row of shops in a large residential area. Her nearest town is three miles



Figure 7.2 Louise's local shops

away. To do her weekly food shopping, Louise travels to neither of these places, but to another town around

five miles away. Her reasons for this are complex, and exploring them gives insight into the relationship between place, identity and mobility.

Part of Louise's local street of shops, 'the village', is shown in the photograph in Figure 7.2. There is a convenience store close to her house, six estate agents, several hair dressers, two kitchen shops, a florist, a craft shop, a 'café-cum-gift-shopy-thing', a dry cleaner's, and two chemists. There are also several empty shops and two takeaways. Louise only goes to these shops to use the chemist; she does not find the other shops useful, saying, with resignation:

'really, when you pop up the village, you can buy a house, you can have your hair and your nails done, or you can go to the chemist.'

Very often, Louise will stop at the chemist in her car on the way to or from somewhere else. As this is generally the only shop she needs or wants to use, she does not see the point of walking to the village.

For Louise, the area compares unfavourably to how it was when she was a child. Twenty years ago, the row of shops that contains a newsagent's and a cycle shop used to have 'a pet shop, a grocer's, a haberdasher's, a delicatessen, chemist, betting shop, hairdresser's, all of that.' Now, many of the things these shops sold are not available in the local area, and Louise has to travel elsewhere if she wants to buy them.

To buy food, Louise must travel to a supermarket in another town, as there are no shops selling fresh food in the village other than the small convenience store, which has a very limited, expensive range of vegetables. Louise finds it more convenient to travel to the supermarket in a town further than her local town, as 'it's easier to park, you don't pay for your trolleys, the aisles are wider... it's more pleasant going there than the other Asda.' Louise's general dislike of the more local town will be discussed in more detail in section 7.3, but it should be noted here that she finds her local area inadequately equipped to provide her with fresh food for her weekly shop, and must therefore travel further, and as there is no public transport from her house to this town, she must drive there. This description of Louise's local shopping area is indicative of a widespread problem of lack of local access to fresh and healthy food (Donkin et al, 1999, p563).

There are several issues here. The issue of food deserts concerns land use planning, changes in retail practices and the changing dynamics of food shopping with the widespread introduction of large supermarkets. Louise can buy food locally, but there is not the choice that she can get at a large supermarket, and she considers the food to be low quality, expensive, and often inadequate, reflecting the view of Whelan et al (2002, p2096) that food deserts are not only a geographical problem. This situation also illustrates an important issue with respect to Louise's environmental values. As discussed in Section 6.3.4, Louise values locally grown food, and it is important to her to support local farmers rather than buying food grown many miles away. However, these values are not played out in Louise's purchasing decisions. The place Louise lives in cannot support her desire for locally grown food, as the local food shop is a small convenience store, part of a chain, which stocks only a very small variety of expensive fruit and vegetables, none local. Louise travels further to another town, where she would be able to purchase locally grown fruit and vegetables, but this would require her to visit several small shops, which she does not have time to do

because of her childcare arrangements, her work obligations, and her busy and disorganised disposition. She therefore buys her food in a large supermarket, which is cheap, but not locally grown.

This emphasises the contradictions between aspects of identity that interact when making decisions. Louise's environmental values, in this case, are diminished by the responsibilities of her parental role, the obligations of her work commitments, and her disorganised nature, and thus play little role in either mobility decisions or food buying decisions in this situation.

In direct contrast to Louise, Amanda is surrounded by all the facilities she needs:

'I'm just in the centre of everything here, there's a bakers round the corner, I've got a school over there, a café a few streets away, a bike workshop just opposite, bookshop's there, chip shop's over there, co op's there, so I've got everything I need, and the allotment's just a bit up there.'

Amanda can travel by bicycle to buy food because she lives near places where she can buy fresh food without having to drive. This is not a coincidence. Amanda's strong environmental values led her to move cities to a community she feels comfortable in. She does not drive, and does not wish to, and so ensured that she moved to a place where all the services she required were within easy access. Amanda's experience supports Jones et al's (2007) view of the importance of local high streets in contributing to sustainable communities. The presence or absence of local, affordable shops affects not only how people eat, but the way that they travel too.

In contrast, Louise lives in the area she has lived in all of her life, and which she has a strong emotional attachment to, and she does not wish to move to another area. Her access to food is dictated by what is around her, and as that access is limited, she must drive to another town to buy fresh food. This emotional relationship with place is an aspect of the relationship between the internal self and physical world, and will be explored in more detail in the following section.

7.2.4 Summary

Section 7.2 has explored the physical aspects of the relationship between people and the places they live in and travel to, as well as the role of identity in shaping that relationship, and how the physical characteristics of

places themselves can influence travel behaviour. It has emphasised the significance of an individual's physical embodiment in relation to the physical environment for shaping travel behaviour, particularly in the context of disability, where social norms influence the physical environment, thereby having a potentially limiting effect on how individuals can travel. Here, local knowledge is particularly important.

The issue of potential dangers in relation to the physical environment has been raised, and this will be discussed further in Section 7.3, particularly in relation to the role of other people in either exacerbating or mitigating those perceived dangers.

Individuals' relationships with place, and the way these influence travel behaviour, have been shown to be influenced by identity, both in terms of the physical characteristics of the individual, and in terms of the characteristics of the environment itself, including what resources are available there, for buying food, for example. Section 7.3 will continue this theme by exploring the more ephemeral aspects of place and individuals' interactions with it, and how these can shape travel behaviour.

An individual interacts with a place as it is, given the resources that are available there. The available resources are shaped by social factors, by planning decisions, shopping decisions and traffic and it is this that the individual then interacts with. Identity is shaped by place in the sense that we interact both with place and in place and that what exists in a place shapes what we can do there.

This section has explored the interaction between the internal self and the external physical environment. This interaction is bound by individual physical traits as well as the material reality of what exists in a place, which is often socially created, as in the case of streetscapes, or food deserts. Access to resources is shaped by financial and geographical situations, and in itself shapes the actions people are able to take. This emphasises the importance of situating the individual within the physical and social structures they inhabit in order to make sense of their behaviour.

7.3 Interaction with place

So far, this chapter has discussed the role of place in shaping travel behaviour particularly in relation to the physical characteristics of both

places and people. Section 7.3 moves on from this to explore the emotional aspects of individuals' interactions with places, and the way that these shape travel behaviour. Aspects of the internal self such as memories, experiences and values can influence how a person feels about a place, making some places appealing, and others threatening, which in turn influences whether they want to travel there, or, if they already live there, whether they want to travel elsewhere.

7.3.1 Feelings about places

Two issues which participants felt particularly strongly about were the way that feelings about places can change throughout the day, and the way that the presence, or absence, of other people can shape feelings about places. Journeys and places that are acceptable during the day may take on a new character at night. These changes emphasise the importance of recognising the temporal element of identity and travel as a key motivator of behaviour, and the significance of having a conceptual framework of identity that can deal with such fluctuations and the dynamic nature of identity.

Negative feelings were particularly expressed in relation to travelling by public transport, especially at night. For example, Louise's concerns are that

'it's dark, the station's horrible, smelly, lots of people hanging about, you never see a guard or anybody that you could ask if there was a problem, there's nobody to approach.'

Louise feels more comfortable during the day on the train, although she does not use it often, because the train is 'busy with shoppers', who she feels are less threatening. Louise feels uncomfortable waiting for a train at her local station even during the day because it is 'a fairly lonely station' and often attracts groups of youths. She explains that

'just a youth standing chatting would not bother me in the slightest, but the ones that shout, swear, and are fairly vocal and big, moving about at it, they are fairly threatening, so I don't like that at all.'

Louise's fear is typical of the way young people are perceived and positioned as threatening as well as threatened.

Louise's intimidation is also supported by Pain's evidence that 'women's fear of violent crime is also fed by more minor forms of intimidating behaviour such as sexual harassment as well as the prospect of violence

itself (Pain, 1997, p233). Louise, as a woman, has what is generally considered to be a vulnerable position in society (Pain, 2001, p903) and has herself positioned the youths at the station as threatening. This has led to her feeling too afraid to travel alone by train by night, and has generally discouraged her from using public transport at all.

The perceived threats of certain places, such as those associated with public transport, can to some extent be negated at different times by 'formal social control' of behaviour (Valentine, 1989, p387) by, for example, police, security guards, bus conductors or park wardens. The presence of some 'authorised personnel' can give the appearance of safety, and this is illustrated by the way Emma feels reassured by the presence of a conductor in her train carriage – she took a photograph of the conductor 'to show that somebody had made contact with me, and that it was a personable service.' Emma felt much better having an authority figure present on the train, 'it was nice, you felt like if you had a question you could ask about it or whatever.'

Louise also indicates her fear is partially caused by the lack of an authority figure. She cites one of the reasons she feels threatened at unstaffed train stations as being because

'you never see a guard or anybody you could ask if there was a problem... and in these days of not speaking to other people in case you set anybody off, you don't feel that you could go to somebody else either.'

Louise feels comfortable when she recognises other people, and when in a place full of strangers feels intimidated. She positions other passengers as potentially threatening, or at least unapproachable and unfriendly. Louise feels she does not belong in this group of people, and this directly contributes to her decision not to use public transport.

Louise's fear is time related. She does use the local train service very occasionally, recently travelling to see a pantomime in a nearby city with a friend and their children. They made the journey in the day, when the train was full of 'shoppers,' and refused to do the return journey by train, instead asking Louise's husband to drive 25 miles to pick them up. Louise's 'mental map' (Valentine, 1989, p385) indicated to her that the train was safe during daylight, with other people she felt she could trust, but at night, the train

became threatening. Louise modified her behaviour by not using public transport at night.

Positioning and fear is not only related to time of day and certain areas. Age is a significant factor in the positioning of other people when travelling by public transport, with young people in particular being positioned as threatening. This contrasts directly with individual positioning of people's own children as vulnerable, reflecting Valentine's conception of children in public space as angels or devils (Valentine, 1996a). Louise talks of 'youths' on the train station, and Lindsay tells of having to 'tell off' two separate groups of youths on one train journey for using 'fancy language' and 'words I didn't want to hear', although she did not express fear about doing this. Louise acknowledged that she had heard stories in the news about 'what's going on in the world' and that this affected her perception of other people on public transport. Pain (1997, p237) concurs, suggesting that

'information from the media and social contact have a role in shaping perceptions about dangerous places but this is invested with meaning by women according to the bearing it has on their existing knowledge, personal circumstances and experience.'

Chapter Eight will consider the way in which Louise, as well as other participants, positions her own daughter as threatened, simultaneously positioning other young people as threatening.

A place's acceptability or otherwise is influenced by a person's values and their ideas of what an acceptable place 'should' be like. A person may be predisposed to dislike and therefore avoid a place if it is not aesthetic to look at, feels neglected, or they feel unsafe there. On the contrary, a place may be appealing if it is familiar, feels safe, or looks pleasant. Aesthetic appeal relates not only to urban design and quality of external public environments, but also to the interiors of place and vehicles of public transport, such as bus stations and train carriages. At the same time, attachment to place is not simplistic, but, shaped by the complexity of interactions of aspects of identity, and thus changes over time. Similarly, perceptions of places can be shaped by the time of day, the presence or absence of other people, and a number of other factors.

Louise refuses to shop in her closest town, because she feels it is too 'civic', with lots of 'councillory buildings, and council done things' – 'I just don't find it a nice experience going there.' This dislike of the local town is

centred around the regeneration of a particular area of the town centre, shown in the photograph in Figure 7.3. This is 'the view from the library to the town hall.'

'The cenotaph is in the corner, not much round it, it's just one big wind tunnel and skateboard park, and when you approach... the shopping centre, it's exactly the same in there, it's concrete... they used to have shrubby things in there and seats and things, it's all gone.'

Louise feels there was little consultation with the local people about the design of the area, and this has resulted in a design that pleases nobody, and does not achieve the aims it set out to achieve:

'part of it is that they wanted to regenerate it and make it look smarter. In my opinion it hasn't, because the amount of chewing gum and spit and sick and everything on the floor, which... doesn't get cleaned up... make it not very nice. I think a lot of it is because if it was getting vandalised, removing [the seats] would solve the problem, it's probably cheaper, isn't it, take away something that can be broken, rather than sort out the people breaking it.'



Figure 7.3 Louise's newly regenerated town centre

The local authority, according to Louise, has misjudged the regeneration, and has removed 'a pleasant enough

place to sit' for people who are 'elderly and needed a little sit' before shopping, and replaced it with

'flippin exposed seats [which] aren't the comfiest thing you ever sat on... there are no backs and you're just looking at the traffic and the buildings and the car park.'

Louise's dislike of this place is illustrative of the subjective element of urban design. Some might consider this area to have been revitalised, opened up, regenerated, with new benches and a fountain included, but for Louise, the change has not been a positive one, and elements of it make her feel

uncomfortable. There are two issues here. One is of personal taste – Louise simply does not like the way that the town centre has been redesigned. This is an individual issue, but clearly related to wider cultural aspects of taste which are shaped by much wider forces in society more generally, and are not within the remit of this thesis.

The second issue is about the general upkeep of an area. One of Louise's complaints about the area concerns the graffiti, litter and 'spit and sick' on the ground. Louise finds this disgusting, and it strongly contributes to her decision not to travel to this town. Lindsay expresses similar disgust at graffiti and litter on the train platform. This compares unfavourably to the trains Lindsay and her husband travelled on in Switzerland, which were of a much higher standard of cleanliness.

Graffiti and litter in a place are not merely an aesthetic concern, but also linked to inherent feelings about a place, and strongly to fear of crime. There is common consensus among the interviewees that graffiti and litter make a place feel threatening, and that this is most commonly felt in relation to public transport infrastructure places, such as train stations. Valentine (1989, p388) explains how 'signs of incivility such as vandalism and graffiti suggest inappropriate or threatening behaviour is possible or permitted.' This is demonstrated by Louise's fear of waiting at her local train station. The station itself is 'very tatty looking' and Louise therefore feels it is 'not the nicest place to be, I never feel particularly comfortable waiting for a train there.'

Similarly, John describes part of his morning commute as 'a bit spooky' where the cycle path goes under the inner relief road and is 'very very overgrown... it's very very dark going under the inner relief road... litter and needles and things down there.' This is an example of the interrelation between the internal and external selves, as well as the social and physical world. A place appears neglected and dirty, and therefore an individual feels fear, which is partly brought about by positioning other people as threatening because their behaviour is uncertain and 'other', making the individual feel vulnerable.

Feelings of vulnerability are not necessarily gendered, but women in general are perceived as being more vulnerable than men, and are positioned as such (Pain, 2001, p903). This positioning is often internalised,

and causes women to feel vulnerable in certain situations, and therefore to try and avoid those situations. The way individuals are positioned in relation to others in the social world has a significant influence on the relationship between place and travel behaviour. Section 7.3.2 moves on to explore the way that people become strongly attached to places over time, which is partly due to a feeling of being surrounded by familiar people – a sense of belonging.

7.3.2 Emotional attachment to place

Participants talked in detail about their emotional relationships with places, particularly around positive associations they held, memories, and feelings of belonging. A place can be associated with positive feelings if it is familiar, contains familiar landmarks and people, and a person knows how to behave in order to belong there. This sense of belonging, of feeling at home in a place, has a direct impact on travel behaviour by influencing which places people choose to travel to, and which modes of transport they feel comfortable using.

For example, Louise's feelings towards the place she lives clearly indicate a strong emotional attachment, to the detriment of other places:

'I feel comfortable [here]... when I went to [other area when first married], although it's only three miles down the road, I didn't feel that was local to us at all, I never did feel that was sort of right somehow... it felt very different.'

The geographical boundaries of Louise's comfort zone are small, and centred on the particular area of a few streets where she grew up and lives now. She possesses a 'strong sense of local identity and loyalty' (Burningham and Thrush, 2001, p24).

Louise acknowledges that this feeling of 'rightness', of belonging in the place that she lives, is created by a number of factors. She has a strong feeling of being 'rooted' in the place she lives, which she says is 'a bit like I'm on a piece of elastic,' always being drawn back if she moves away. Louise feels this rootedness is 'a family thing, because Mum never moved very far, her parents, grandparents, probably great grandparents come from round here somewhere.' The attachment is also perhaps related to the amount of time both Louise and her family have spent in this place, the experiences have become strongly rooted in Louise's internal self, helping to make her the person she is.

When looking through her photographs during the interview, Louise mused about how she feels about the local area.

‘The more I look at them I just think, god, we live in such an unattractive place! That’s what I see when I go round the corner, I think it could be nicer, but never mind.’



Figure 7.4: Near Louise’s house

Louise feels the area is not taken care of, and this contributes to its ‘shabby’ look.

‘We don’t seem to take that much pride in what it all looks like, the shops aren’t bothered about brushing outside the door, or keeping it clean.... It’s a bit sad really.’

Louise has a significant feeling that she belongs to the area she lives in, and it is this that overrides her concerns about its lack of aesthetic appeal and convenient shopping facilities. It is a feeling that reflects Holloway and Hubbard’s (2001, p75) argument that

‘intimate knowledge is gained over a long period of time through an extended encounter with place. In turn, this invests the individual with a deep sense of that place, making the place an extension of the individual.’

Louise has positioned herself as part of the geographical community, and that positioning has been accepted. This feeling is not confined to specific relationships and acts of positioning, however. Louise does not interact individually with most of the people in her community, does not even know many names, but is comforted by a nod of the head, a hello in the street, or even a familiar face. Louise identifies with the local people:

'not even necessarily to speak to, but to see familiar faces when you go somewhere, to be able to stop and chat... it's like having a common bond... everybody knows a little bit about somebody else, that's quite important, otherwise it's quite isolating.'

Familiarity is comforting, and adds to the feeling of safety in a place. When Louise married and moved to a different area three miles away from her childhood home, the faces she had known since childhood were gone, and she felt isolated and threatened enough to move with her husband to the street adjacent to the one she grew up in. This reflects the idea that in places where people have 'strong social and family ties through long periods of residence', social control of behaviour can be provided by a 'stable neighbourhood' (Valentine, 1989, p387). People become familiar with their surroundings, and are therefore 'more easily able to recognise strangers and inappropriate behaviour' (ibid). This is particularly illustrated by Louise feeling safe when she recognises people in the street, and unsafe when there is nobody she knows, and she does not feel comfortable approaching strangers.

Amanda talks of this sense of identification too, but specifically in relation to a community of values contained within the geographical community in which she lives. Amanda moved from one city to another to be closer to people she felt shared her environmental values, which are very important to her:

'I like this area... it's hippy, it makes me feel safe because I'm surrounded by people that I get on with really well and have the same values as I do.'

Feelings of safety are, again, associated with familiarity, and in Amanda's case, shared values. While Amanda values her community, the community itself and the values are separate but strongly influence each other.

Amanda moved to the community because there were other people there who shared her values – it is possible that other people have done the same, growing the community and building on the sense of shared values already there. Values and a sense of belonging are distinct, but significantly influence each other; a shared sense of values leads to a feeling of belonging to a group.

For Amanda, this is created by a sense of belonging, being 'part of the puzzle.' In her previous town, Amanda had been on the front page of the

local newspaper because she had her son in a bike seat. She was positioned as unusual in the community, and this made her feel uncomfortable. Amanda's environmental values form a significant part of her internal self, and in turn are presented as an important element of her external self. When she was positioned so publicly as unusual, as 'other' on the basis of such a significant aspect of her identity, she decided to move to another city to gain feelings of belonging.

Amanda's neighbours in her new home have been cycling for many years, and cycling with children is not seen as unusual. The city she now lives in has a much higher rate of cycling, and Amanda now feels like she is 'not doing anything extraordinary.' Amanda's experience illustrates how there can be conflict between the presentation of the external self, and the positioning of that self by other people, and how that negative positioning can cause feelings of discomfort and otherness. Amanda resolved this situation by moving to a community where her values were accepted.

A significant part of emotional attachment to a place consists of identification with the people there. It is not necessarily specific individuals or particular interactions that give meaning to a place, but rather a series of interactions, nods of heads, recognition of faces, that make up a feeling of familiarity and affection. Louise and Amanda have different priorities, but both value the sense of community and sense of belonging they have where they live. This has influenced mobility choices for both of them. Louise will not move from the place she lives, despite the inadequate facilities, and therefore must drive to another town to buy food. Amanda moved cities to become part of a community, and in order to be able to travel the way that she wanted without being positioned as unusual. This experience and value of community links to feelings of safety and predictability.

Jim also shares this emotional attachment to place, but for Jim the attachment is to a general 'sense of place' rather than to a specific place. He lives on a narrowboat, and described in the interview his walk home from work along the canal, and spoke about the 'lovely anticipatory feeling' walking up the steps to the aqueduct, shown in the photograph in Figure 7.4, at the top of which he will 'be on the lovely canal, which is my home environment.' A strong part of Jim's internal self relates closely to his feeling of being rooted in his surroundings, feeling strongly that he is 'a part

of nature', part of the ecosystem, along with other species. Jim's sense of belonging is to a group encompassing nature, not just a specific group of people, and this belonging forms a strong part of his emotional attachment to place.

Jim's emotional attachment to place is intertwined with his strong environmental values. As discussed in Chapter Six, Jim's values are biospheric in orientation, underpinned with a love of nature for its own sake. He feels 'in tune with nature', and this influences his attachment to place and the natural world because he feels part of it. It also directly contributes to his decision not to drive or fly:

'I feel a close connection with nature, and with other species and with trees, and by flying everywhere, I'd be destroying, you know, or contributing in an important way to the destruction of those things that are important, that are part of me in a way.... I'd be destroying my habitat, is one way of looking at it.... by taking one flight, or driving in a car... it would be a contribution towards just making things extinct, you know, whole species extinct, so I can't do it.'

Thus emotional attachment to place is created and strengthened in different ways. It can come from spending time in a place, as for Louise, or from feeling a sense of belonging and identification. Louise's attachment is to a specific place, along with the people who make up part of that place, and is so much a part of her identity that it 'feels genetic'. Amanda's attachment is different, being predominantly based around the people within the place rather than the place itself, and her personal identification with their values. Jim's attachment is different again, being neither about a specific place nor



about a set of people, but rather about a sense of being personally situated within an ecosystem, such a strong sense of

Figure 7.4 The steps to the canal where Jim's boat is moored

being a part of nature, of belonging to the world and the place around him, that it affects his travel decisions. The relationship between identity and place is not straightforward.

7.4 Conclusion

This chapter has demonstrated the prominent role that aspects of the interaction between people and place play in shaping travel behaviour. The physical characteristics of people, combined with the physical characteristics of the places they inhabit, can combine to significantly shape the way that they can, and do, travel. The interaction is that of people with place, but also of identity with structures. A physical disability, or a lack of fitness, is an aspect of individual identity, but the nature of the surrounding environment, for example lack of accessible buildings or inadequate public transport infrastructure, combine with that aspect of identity to shape travel choices.

This chapter also recognises the key role of time, often working in conjunction with place, in shaping identity and travel behaviour. The time of day can have a significant effect on how people feel about places, and how and where they are prepared to travel. This emphasises again the dynamic nature of identity and demonstrates how the influence of both time and place on identity can shape travel behaviour.

Emotional attachment to specific places can be very strong, and can become a significant element of an individual's internal self. As such, it shapes travel behaviour by influencing where people choose to live and spend their time. The relationship between people and place in terms of travel behaviour takes place within the context of external social structures. These social structures shape the physical environment: disability is not always adequately catered for, limiting access to places for some people; and cycling is seen as a minority activity in many places, meaning that there is not adequate infrastructure provision. Wider structures also govern placement of food shops and leisure facilities, for example, and this can shape the way individuals feel about and act within the places they inhabit. People inhabit similar structures, but the way that they inhabit them, and therefore the influence, whether constraining or enabling, on their lives and travel behaviour, is dependent on aspects of their individual identity.

8. People

8.1 Introduction

The previous three chapters have, to some extent, begun to illustrate the importance of relationships with others, and the ways these are mediated by identity, in shaping travel behaviour. Chapter Five demonstrated how journeys are negotiated with other people. Chapter Six explored in part the role of other people in influencing environmental values, and therefore in some way shaping travel behaviour. Chapter Seven illustrated the role people play in making places seem more welcoming or threatening. Chapter Eight draws from the information presented in the previous three chapters to explore these relationships more specifically and in more detail, looking in particular at close family relationships, and the obligations and constraints these place on people in their roles as parents, family members, and friends.

The interactions discussed in this chapter, more so than those in the previous two chapters, are primarily situated between the internal and external selves. The presentation of the internal self to others through the external self, the positioning of the self in relation to others, and the process of negotiating others' positioning of the self play a prominent role. The chapter emphasises the relational dimension of identity, and the importance of other people in shaping identity and influencing travel behaviour.

8.2 Obligations to others and constraints on travel behaviour

The two primary issues raised by the participants in relation to other people and travel behaviour were that of travelling with children, and visiting family members. Travelling with children carries a rather specific set of concerns, both around which modes of transport are most appropriate or preferred, and, perhaps more significantly, around the negotiations that are inherent in ensuring children get to school on time – perhaps a particular concern for working parents. Parents among the participants faced a similar set of issues, but dealt with them very differently, according to other aspects of their identity and circumstances. Participants had similar experiences in negotiating visiting their families, particularly when they lived in another

country, and the ways that individuals dealt with these experiences is illustrative of their priorities, and the way that aspects of their identities impact on their travel behaviour. It is therefore instructive to explore these in some detail.

8.2.1 Travelling with children

All of the participants with young children in this research commented on the logistical difficulties of the journey to school, and the impact this journey had on shaping their travel decisions in general. For example, Ingebjorg has two young children, and both Ingebjorg and her husband work full time. They have also recently moved to a new area of their city, so the journey to school requires some negotiation:

'when I'm by car, my husband is on his bike, and then if I'm putting the kids to the institution and he's picking them up, then the big one doesn't have her bike. There's a little bit of coordination there. We just say, ok, you have to pick them up, we haven't solved it yet! So actually, that's why... sometimes it would be easier for us to ride our bikes.'

However, as Ingebjorg has to travel to work after taking her children to school, it is more convenient for her to drive

'because then I can go straight to work... and then it's a tour of about twenty minutes... I could bike to the station and take the train, and I'm not sure it would take me more than fifteen or twenty minutes more, so it's not a problem, but it's just so easy taking the car. ... It gets me [to work] quicker, it's nice that you can leave whenever you want. If I were going by train I have to look at the clock and say, oh, I have to go, because if I have to pick up the kids I want to go now. I would go a lot earlier from work than I do now.'

Ingebjorg's choice of transport for her journey to work is limited by the fact that she also has to take her children to school at a particular time. For Louise, this is a source of frustration, as it limits the time available during the day, and as well as this,

'I only work an hour at lunch time, it's right slap bang in the middle of the day though, it makes it fairly inconvenient to do anything big at either end of the day.'

These factors combined mean that Louise often uses her car more than she would like to.

'I do quite often use the car as something I can get in and go very quickly somewhere, rather than taking half an hour to do something I can do it in ten minutes, it's a convenience thing... I do think about it, but really, it could be such a backwardsy and forwardsy day that I

have, the times that I can do something in ten minutes rather than half an hour can make a big difference to my day. I don't need the hassle of something taking longer than it needs to sometimes, because I do tend to volunteer to do more than I can probably handle.'

The role of being a parent, which can involve having to travel to school twice each day, has a significant effect on the time available to parents to do other things, which in turn affects mobility choices. Louise describes how her day is broken up by these trips to and from school, meaning that she often has to drive to other places, such as the doctor's surgery, as she does not have time to walk – 'it's quite a bitty existence going on, dashing backwards and forwards to places really.' Louise herself admits she is 'not very organised', and 'you can bet your life, if I make a doctor's appointment... I'll book it on a day when I'm doing something at ten o'clock, so I'll dash in the car, dash back, go somewhere else.'

This is partly related to location; as described in Chapter Seven, Louise does not have many useful amenities in the local area, and therefore this adds to the increased time pressure. For Amanda, the opposite is true – she has shops, schools, cafes, and everything that she needs within walking distance.

This is also an issue of social interaction. When Louise's daughter was first born, she did not have her own car, and her husband worked during the day, so she had to walk or use public transport when she went out with her daughter. She found this to be a rather lonely time.

'It is very isolating once you've had a child, if everybody else is out at work, your neighbours aren't there, and you have no car, and public transport isn't easy, especially if you've got a pram. You get a car and... like if I'm really fed up and I need to get in that car and go somewhere, I can.'

This example demonstrates the differences that both identity and situation, as well as roles as parents, can have on travel behaviour. Ingebjorg, Louise and Amanda must make the journey to and from school twice each day, to drop off and pick up their children, but this affects their travel behaviour in different ways. Ingebjorg and her husband both work full time, so the journey to school must be negotiated between them, and their decision making must include the obligations each of them has as an employee. Louise's husband does shift work, and is often not available to take their daughter to school at the appropriate times, and Louise sees this as her

job. Amanda is a single parent, and must take her son to school herself. Activity spaces, or how and where people travel – are to some extent dictated by people's roles in society, for example as parents (Holloway and Hubbard, 2001, p28). While there are not set activity spaces for parents, the constraints, or perceived constraints, of the obligations of the role do shape when, where and how people travel.

Different again is Andrew. Andrew and his wife have three daughters, two at different schools and one at preschool. The whole family travels to school together on two tandems:

'we have three children, so we have two tandems now, and both of them are fitted with a carrier at the back which will take a bike seat. So the usual arrangement is, I go with our eldest girl, who is eight, by bike. My wife goes with our four year old and our eighteen month old, the four year old obviously riding in the tandem position and the eighteen month old in the child seat, and where we can we leave together.'

This rather unusual arrangement is underpinned by a number of factors:

'it's faster... it also allows you to get access to different parts of [the city]... you can zip through the little maze of streets, so it's a flexibility as well as speed and efficiency.... It keeps us relatively fit, which, particularly having small kids is not particularly easy... and then finally... you do feel good, we are doing very, very little damage to the environment by doing this.'

Andrew's journey to school is also enabled by his working life. Andrew works from home, and his wife works full time but has arranged her working day to start after she drops the children at school, and to finish at an appropriate time, so both Andrew and his wife are available at the start and end of the school day to make the journey together. The school is close enough to home (where Andrew works) and to Andrew's wife's workplace to make the journey feasible by bicycle with three small children, both in terms of time and level of physical fitness. The ability to find a creative solution to the constraints of the school journey is supported by the family's financial situation, and their ability to buy two tandems:

'we started with... solo bikes, which is just an ordinary bike with a bike seat on the back, and the kid sits there.... Then we graduated to the trailer bike, which will accommodate a smaller child than the tandem – even the smallest backed tandem we could find won't take a three year old.... We moved onto the tandem, largely because first of all we had three kids, and there was no way trailer bike technology could manage that.'

These descriptions of the journey to school for the four participants who are parents of young children illustrate the complex interweaving of aspects of identity and situation which go into making travel decisions. For Louise and Amanda, the school journey is short enough that they could walk.

Amanda's strong environmental values and decision not to drive have led her to live in a community where she has easy, quick access to all of the amenities she needs during the day within walking distance. This is not the case for Louise, who lives in the community she herself grew up in, and this means that, in addition to the time constraints imposed by the two journeys to and from school each day, and her responsibilities as a lunchtime supervisor which mean she must be back at the same school during the middle of the day too, she has little time between these obligations, and therefore must drive to do errands during the day.

Ingebjorg and Andrew both work full time, and both have partners with whom they can negotiate the school journey. Andrew's flexible working pattern and close distance to his daughters' schools, as well as his financial situation, mean that he has developed a creative solution to the school journey. His journey back through the city centre on the tandem each day allows him to stop off at the local market for fresh food, which he would not be able to do in a car because of parking and traffic restrictions. Ingebjorg's kindergarten is quite far from their house, and they are new to the area, so still working out routes and train times for alternative ways to get to work. This example demonstrates the way in which both identity and travel behaviour change over time and with place.

It is also noticeable that while Ingebjorg and Andrew have routine ways of getting to school, Ingebjorg by car and Andrew by bicycle, both have alternative modes which they do use occasionally. Andrew drives to school 'in very, very severe weather, or anything more than lightish rain or modest cold... partly for our own comfort, but predominantly for the kids,' and Ingebjorg currently drives, but is trying to work out an alternative involving bicycles and trains.

For both Louise and Ingebjorg, the time constraints of the school journey mean that they use their car more than they would perhaps like particularly for other journeys that must be accomplished during the day, such as travelling to work for Ingebjorg, and to buy food for Louise. This reflects findings from the *National Travel Survey*, which reported an increase in

journeys to school made by car from 16% in the mid-1980s to 27% in 1998-2000, with 65% of respondents saying they would prefer not to drive but felt they had no reasonable alternative (DTLR, 2002).

The decisions about what mode of transport to use each day are shaped within the context of other, identity related decisions which have already been made. Amanda, for example, as outlined in the Chapter Seven, has particularly strong environmental values, and does not drive at all because of them. This overall decision shapes the smaller, everyday decisions that she makes about transport. It also forms a significant part of both her internal and external selves, and she is often positioned on the basis of it. Andrew's choices are situated within his financial context, and as such, his choices are more open than Amanda's for example. Amanda wishes she could have a tandem but her financial situation as a single parent with two children means that she cannot afford such transport. Instead, she intends 'borrowing a trailer bike for a few years.'

Income and flexibility affect the ability to pay for creative options for the school journey, but these must also be supported by a wish to travel by bicycle, for example. Amanda and Andrew are both motivated by this, both for health and environmental reasons, but in practice Andrew finds it easier to achieve than Amanda because of his economic situation.

To recap, there have been several comparisons between participants' behaviour so far in this section which illustrate various points about the relationship between identity and mobility. Several people feel compelled to make journeys by car that they would prefer not to because of a lack of time caused by restrictions of school hours or their own working obligations. Travel decisions are made in the context of these restrictions on time. Environmental values must sometimes be coupled with financial ability to fund creative solutions to mobility practicalities; Andrew can afford two tandems, and has both a wife and a job that enables him to work at home, and his journey to school with his three daughters is shaped accordingly. The influence of facilities such as shops, as explored in the detail in the previous chapter, again is an issue when shaping decisions about where and when to travel.

Safety was also mentioned as a priority by participants with young children, and this has a significant effect on travel behaviour, although this is

different for each of the participants. The specific form that concerns around safety take is influenced by various aspects of identity and the way they interact with individual context. Self-imposed restrictions excluding the use of public transport often come about because of fears of safety when travelling with children, as well as practicalities. For example, Louise often feels afraid when travelling on public transport:

‘there’s never anybody on [the trains], and it makes you a bit nervy really... people can be quite intimidating, I’ve been on the train once when somebody’s been sitting there talking to themselves, obviously completely barmy, and there’s nobody on there, well, it’s fairly unpredictable behaviour, isn’t it? Especially if you’re travelling with a child... it’s harder to up sticks and move somewhere else.’

This is not the case for everyone; Amanda describes her good experiences of travelling by train with children:

‘you can walk around, there’s always things to do, there’s always people to chat to, they give you freebies in the buffet for your kids, there’s always other kids, and everyone’s always really nice to you when you’ve got kids.’

The different experiences are influenced by identity, particularly in the form of disposition and occurrent attributes, such as previous experience. While to some extent the differences may be to do with the different types of train Louise and Amanda travel on – Louise has only travelled by small, local train, whereas Amanda travels on larger, regional services with food facilities and perhaps a wider variety of passengers – there seems to be something deeper here. Amanda, who is well disposed to public transport because of its positive environmental impact, and who has also had many positive experiences travelling by public transport, enjoys the experience, particularly with her children. In contrast, Louise, who has had many negative experiences of travelling on public transport, and describes herself as having an ‘anti social’ disposition, disliking crowds and strangers, feels threatened by the presence of strangers, particularly if they are behaving oddly, and therefore is not inclined to travel by public transport with her daughter. There may also be an element of rationalisation here – it is perhaps perceived as being more acceptable to refuse to travel by public transport because of a concern for children’s safety than just a general dislike.

Parental role responsibilities extend beyond the early years of childhood. Both Lindsay and John have teenage children, and have found that aspects

of their travel behaviour are shaped by them. Lindsay drives to collect her children from their friends' houses, as she is concerned about their safety:

'I like to make sure they get home safe at night, and no-one's going to get into any trouble or anything with other people hanging about.'

She also occasionally drives her son to and from his part time job. Similarly, John's three children borrowed his car, as well as him giving them lifts to and from places. When two of them moved out and the third bought his own car, John realised that he and his wife hardly used their car, and were able to make the decision to sell it and live without one.

'When our children were in, before they were able to drive themselves, they needed ferrying around a lot. Well, they didn't need ferrying around a lot, they managed to negotiate being ferried around a lot! And the mileage on the car was... about eight or nine thousand miles a year. Then when they learned to drive they used that car, and the mileage went up to about twelve thousand miles a year. And then as they each either left home or got their own car, we were left with this car that hardly ever got used.'

The fact that John could decide to sell his car at this stage illustrates the changes over the life course, in this case of being a parent, which shape the way in which travel decisions are made. This is true, although perhaps less so, of other changes in relationships over time, particularly those with a partner or spouse.

John 'married into a car'. He did not have one previously for various reasons, but his wife owned one when they married. At this stage, John did not drive, but he

'learned to drive when Julie was expecting our first child... I just thought I might have to make the dash to the hospital, so I thought I'd better learn to drive.'

John and his wife have since sold their car, but John's early experience demonstrates the way in which relationships with others can shape transport choices and the availability of options in a very real way.

8.2.2 Visiting family

In adult life, the influence of family on identity still plays an important role in shaping travel behaviour. Children may move away from their family, and this will often mean travelling back to visit them. This necessity is intensified by illness in the family; travelling may become more frequent, or there may even be a house move involved. There are decisions to be made about travelling to visit family, and as relationships with family are part of identity,

these decisions will be made filtered against other aspects of identity, most crucially values.

For example, Helsa has moved from Denmark to Sweden for family reasons - 'because my daughter lives there, and because I don't get so much in the salary.' This is good for her because 'it's good that we can live together as a family, we can visit each other, it's economical and also social.' It does mean that Helsa has to travel further to work each day by train, but this is compensated by being closer to her family. Helsa does not drive, and now that she has moved to the same city as her daughter, all her family are close by and within walking distance. Being close to her family is important for Helsa, and this was a significant factor in her decision to move to Sweden.

Paul's situation is different, but still the influence of family on his travel decisions is significant. Paul has recently started to reduce the number of foreign holidays he takes each year for environmental reasons, but he still travels to see his family.

'I suppose for family, it's a bit difficult. My mum lives in Birmingham, I go and see her there, that's less of an environmental impact. But then I fly to the Caribbean [to see my father], but again, I'm kind of seeing family still, so that's not really a luxury.'

Paul's situation is unique amongst the interviewees, and strongly illustrates the relational nature of identity and the significance of its impact on mobility choices. Paul's situation poses particular problems:

'The problem is, if your parents were immigrants, and that's where you live, and then they go back to where they're from, either you sort of break family ties and don't see them, or you have to fly there.'

In keeping with his increasingly environmental values, Paul has cut back on other flying trips, but is not prepared to reduce visits to his father. This emphasises again the significance of prioritising, and how some values, in this case valuing family, can be prioritised above others, such as environmental values, in certain circumstances, to shape mobility choices. Paul displays here a value hierarchy of family, then environment, and then holidays, and explicitly recognises the contradictions between them.

John expresses similar emotions about visiting his daughter:

'Well, roll on carbon credits, cos the one thing I do do is fly. My daughter has moved around. I've obviously visited her in lots of

places, they've been my holidays, so I've gone to Frankfurt, then she lived in Spain for 3 years, so I visited three or four times a year. I do feel some moral responsibility to do something about it, but when it comes to saying, alright, don't visit your daughter for a year...'

For John, 'it's a family thing', and he laughs as he says 'that's more important than preserving the planet for future generations of my family....' Like Paul, in this area of his life, John prioritises his family over his environmental values. In many other areas of John's life, his environmental values come first.

There are other options to physically visiting family. John's mother lives relatively close,

'but I always feel a bit for resistance in the winter. My mum lives about five miles away, and it's uphill all the way, and sometimes, if it's a stinking horrible day, I can't be arsed to do it [by bike], I spend half an hour on the phone to her instead.'

However, this is not a long term solution for John, and he will actually visit his mother often, but this does not compromise John's environmental values, as he can and does cycle to visit his mother. John works within a complex range of options. He has chosen not to have a car, his mother will not let him take a taxi, he can cycle, so he does, but sometimes the weather is cold and wet, so he uses the telephone instead. Visiting his daughter when she is abroad involves a different set of options – not to visit at all, which John considers unacceptable, to travel by train, or to fly, which John does, even though he is uncomfortable with it, because he prioritises his family over the environment on this particular occasion.

Decisions about visiting family are occasionally compounded by illness, and this can change the prioritisation process and therefore the way that travel decisions are made. Jim's mother was recently in hospital, and he 'was having to go from Stoke to one of the hospitals in Chester'. Because his boat was at that time quite a distance away from Chester, and he was travelling by public transport, this was taking a long time:

'I did think, for some people, that they could do it in an hour or something, and it was taking me all day to get there and back.... my friend got to Krackow quicker than I could get to Chester!'

Jim occasionally sees this type of situation as one of the negatives about not driving, but his environmental values are so strong, and so significant a part of his identity, that he would not even consider driving.

So, visiting family entails a significant set of journeys for many people. Decisions about these journeys are undertaken with reference to circumstances, distance, and aspects of identity, such as emotional closeness to family and a sense of obligation. The family themselves influence such journeys by perhaps moving to another country, in the case of John's daughter and Paul's father, or unwittingly by being ill. These all place constraints on travel behaviour and the decisions surrounding it. Aspects of the internal self influence the way that people prioritise a series of values, and this prioritisation, as well as the values themselves, can change over time and with situations. This relational dimension of identity is so significant in influencing travel behaviour. Aspects of individuals' internal selves are constructed through their relationships with other people, and those relationships with family and others shape the way the elements of the internal self interact, and the influence of identity on travel behaviour.

8.3 Influence of family and gaining independence

All participants identified aspects of their childhood mobility as significant in shaping their later travel behaviour, and, in particular, their experiences in their late teenage years. Cycling as a child was considered by the participants to be particularly important, especially so by those participants who continue to cycle regularly in their adult life. For example, Dan grew up in a rural area, and when he was a teenager started work as a lifeguard in a town eight miles away:

'I used to ride [a bicycle] there and back mainly because I had to, because there wasn't a bus and my parents were obviously at work during the day so I couldn't use the car.'

Dan's early cycling experiences were positive, and were influenced by a number of identity related factors. His physical situation of living in a rural place meant that public transport was limited, and this, combined with his parents both working full time and being unable to drive him to work, led him to decide to cycle there. Dan's decision to cycle to work, influenced by these outside factors, was also shaped within his own internal self, including the skills he possessed. He 'had to' do cycling proficiency training at school as a child – 'even people who didn't have bikes had to borrow one and do it.' This gave him a degree of confidence in riding a bike on the road, and meant that later, he was able to consider it as a practical option.

Dan's experience of riding to school and work gave him confidence as a cyclist, which he believes that people without similar experiences do not have:

'I'm used to cycling on roads so I'm quite happy to do that, whereas I think somebody who hadn't cycled much at all on busy roads, I think they'd maybe find riding a bike in a built up area quite scary, which quite honestly, it can be.'

Dan's cycling confidence became part of his stock of experiences within his internal self, creating positive associations, and meaning that he could later choose cycling as an option, having confidence and positive experiences to draw from, which he sees as very important. Dan's experience also illustrates the importance of seeing cycling as a learned skill in a similar way to driving, and which becomes part of the internal self as an aspect of identity to be drawn on in later life.

John also cycled as a child, and although he stopped when he was 13 – 'we moved house... and for some reason my bike didn't come with me, I never saw my bike again' – the freedom having a bike gave him as a child meant he could take it up with confidence again as an adult. Like Dan, John's early positive associations with cycling became a significant part of his internal self, and he could draw on them later when making transport decisions.

For John, early positive associations, memories and experiences override later negative experiences. In twenty years of cycling, John has been involved in three accidents, but while 'your heart rate tends to go up with that sort of thing,' it has not discouraged him from cycling. Amanda, also a regular cyclist, has a similar attitude. She started cycling to get to college, as

'I had this mental block about asking for bus tickets, I was painfully shy when I was 17, so I couldn't ask for a bus ticket, it's really pathetic. I used to get my dad to drive me to college eight miles away.... And then I got a bike and started cycling in, cycling 16 miles a day, and learning to be a cyclist.'

Amanda took her bike to university to cycle to lectures, but in the first month she 'got knocked off, nearly killed' by a car driver. Her hip injury still affects her now, and at the time she was furious:

'I just don't like injustice, and I felt so cross that because I was a small vehicle, what right does someone have to just run me down? As soon as I stopped limping so badly I went down to the council...

and I was saying “when are we getting cycle lanes?” I’d never been to the council about anything, I didn’t even know how to do it, I think that’s why I became a bit political.’

Learning to ride a bike for practical reasons, and the experiences that went with that, led Amanda to become ‘become political’, demand her space on the road, and become a keen cyclist. While Dan and John both had a supply of positive experiences to draw on from their early years of cycling, Amanda did not have this, as she was hit by a car not long after starting to cycle as an adult. However, all three people developed a similar enthusiasm and commitment to cycling, despite their different experiences, that has become a significant part of their identities, although in slightly different ways.

Dan, John and Amanda all started to cycle at a point in their lives when it gave them independence from their families, and allowed them to travel freely, alone or with friends. These formative experiences of cycling as a positive activity, despite dangerous incidents, have shaped both their attitudes to cycling and their inclination to use a bicycle as a means of transport. Cycling is a skill, often learned in childhood, sometimes formally, like Dan through the cycling proficiency scheme at his school. However, learning to ride a bike is not given the same status as learning to drive, another activity associated with this time of growing independence.

Several of the participants learned to drive at 17, often encouraged by their families, whether by general support, or financial. Dan, for example, considers that he was ‘forced’ to learn to drive when he was 17, by his parents who bought him driving lessons for his birthday, and had an ‘expectation’ that he would learn to drive. He believes this is partly due to growing up rurally – ‘I know far more people who grew up in towns and cities who can’t drive, than people who lived in villages.’ This parental expectation was also experienced by Ingebjorg, who had

‘kind of a family tradition, if you don’t smoke you can have your drivers’ licence.’

This tradition, of parents or grandparents paying for driving lessons if a teenager does not smoke is, explained Ingebjorg, a tradition ‘in many families’ in Denmark because ‘it was a big deal for them [her grandparents] that I shouldn’t smoke, it was because it’s not healthy, it’s expensive.’ Driving lessons are given as a reward for ‘good behaviour’ – in this case not smoking – or in Dan’s case because his parents did not want him to be

reliant on them for transport. This is one way of family expectations shaping the skills and attitudes, and therefore the identity, of young people.

Louise learned to drive when she was 17, although this was her own decision, and she paid for her lessons herself. She had 'always wanted' to learn to drive, and at that time had a job working 'stupid times.'

'Dad used to give me a lift if I was working early, because there wasn't a bus then, and he used to on Sundays, there were never any buses to get me there for 7 o'clock on a Sunday.... I worked Christmas Day for so many years, and trying to get public transport on Christmas Day, well, you can't.'

Louise was also attracted by the general independence of being able to drive, 'being able to go shopping when you want', and bought her own car as soon as she passed her driving test. Louise contrasts her own independence, gained through being able to drive, to the situations of '17 year olds now', who are 'still in school, still being driven round by their mum and dad.' Similarly, Jim describes learning to drive as 'a rite of passage' and like 'proof that you're an adult,' a goal to aim for. Throughout his childhood his parents often talked of buying him a car when he was 17 and could drive, although this did not happen - 'in fact, they didn't buy my car, I bought my own!'

Emma's experience of learning to drive is similar to Louise's, although Emma's incentive to learn to drive was not work, but her boyfriend:

'we both learned to drive when we were 17, and because we sort of grew up together, we were dating from quite an early age, and I lived 35 minutes drive away from him, so the minute we could drive it was fantastic, we could nick our parents' cars and just go and see each other, which was brilliant.... So I suppose we've got quite a lot of fond memories of being in the car together.'

Emma's relationship with her then boyfriend, now husband has been facilitated by driving. They learned to drive and could then independently travel to see each other, and in the early years of their relationship used to drive together on day trips to Knowsley Safari Park and other places. So, for Emma and her husband, driving is not only a skill, but also has positive associations with pleasant experiences. Emma enjoys being in a car with her husband, seeing it as 'an excuse to talk.' When travelling together, they most often choose to travel by car, not only because of convenience, but also these pleasant associations.

Overall here, there is a pattern of transport playing a key role in gaining independence on the threshold of adulthood, and the experiences gained at this time forming a significant part of the internal self to be drawn on later in adulthood. Starting work, acquiring a partner, and wanting freedom from parental restrictions are all important parts of this.

Participants' experiences at this time often significantly influenced their behaviour and attitudes later, and this does not appear to be confined to one particular mode of transport for all the participants. Learning to ride a bicycle gives confidence and ability when cycling, and among the participants, those who rode bicycles regularly as children also tended to be those who rode regularly as adults. Learning to drive at this time carries positive notions of freedom, independence from family, and widening possibilities. This may go some way to explaining the strong psychological attachment some participants have to driving. It also emphasises again the role of time and changes over time in shaping both identity and travel behaviour; a reflection of the dynamic nature of identity, and an element not captured in more static studies of travel behaviour.

8.4 Positioning and travel behaviour

This section explores the relationships between the external self and society, and individual positioning in relation to other people, whether they be friends and acquaintances, or strangers. Chapter Seven explored some of the ways in which people position other people as threatening in various places, particularly at night, or if they are unfamiliar, and also how people feel more comfortable in a place if they feel they belong there. This section builds on that to explore how people's travel behaviour is influenced by the expectations that others have of them. This was not raised as an issue for all of the participants, but it is nevertheless a significant aspect of the relationship between identity and travel behaviour for some people, and therefore worth examining.

Travel behaviour can be influenced by an individual's perceptions of how others will view them. For example, John describes how his children differ in their travel behaviour, and how this is partly due to their social environment. His daughter, who is now 27, cycles regularly and takes her bike when she moves cities. His two sons, however, do not ride bikes at all, and both have cars.

'I think it's partly to do with identity, it's also to do with the fact that they [his sons] have stayed in the area they were brought up in, so all their cohort, all the kids they grew up with... have ridiculed people who ride bikes, or caught buses, or do anything other than get to seventeen and buy a car, and around them I think they'd probably feel a bit self conscious.'

John's daughter has not stayed in the same area, but 'moved away' and lived in Frankfurt for a year, where lots of other people cycle regularly, 'so she's always had that kind of easy experience of cycling, and not had any cultural pressures on her not to.' When she returned home, however,

'she was stood at the bus stop, and one of her friends from childhood pulled up in the car, said "what are you doing?", "I'm stood at the bus stop, I'm waiting for a bus, aren't I?" "well why are you waiting for the bus?" and it was your 'ride', it wasn't your 'car', it's all a bit hip hop and all that, "you sold your ride? Why?" Incredulity that she could have actually chosen not to have a car.'

John describes the area that he and his two sons live is a 'low income area' and John believes this may have influence perception of public transport as 'low status.'

'There's a perception that the bus is for people really who have no choice and no options, and that if you're seen on it, you're just a bit of a loser really. Well, they were brought up in the Thatcher era, and she said if you got to 25 and you hadn't got a car you were a bit of a failure. And it struck a chord, culturally, in areas like [here]... ways of demonstrating status are very important in areas like this'

So there is a pressure on John's sons from their friends to have a car, with a loud sound system, and a perception of the undesirability of using public transport. This has not influenced John's daughter in the same way, as she has been exposed to other cultural situations where it is the norm to cycle and use public transport.

This desire to fit in, to belong, contributes to the development of a delicate balance between the internal and external selves throughout the life course, which results in different aspects of the internal self being prioritised for display through the external self at different times. John present an example of how, even when strong environmental values are translated into travel behaviour, there can still be an aspiration to 'fit in' with the surrounding social group. John explains:

'I don't care as much what people think, but it's a gross exaggeration to say I don't care at all.'

The fact that John does care to some degree what people think of him is illustrated by his choice of cycling jacket, which is 'grey and looks very

ordinary.’ This conscious choice to wear grey rather than fluorescent yellow stems from John’s belief that a high visibility cycling jacket makes a very definite identifying statement, positioning him and labelling him in relation to others:

‘it just singles me out as being different to everybody else, it identifies me as a cyclist, rather than being me, who happens to ride a bike.’

John is particularly conscious of who his external self is being presented to. His associations with, and enthusiasm for cycling are revealed to his friends and colleagues, who have a lot of contact with John and can therefore build up a complex picture of who he is – ‘there’s more to me than being a cyclist, I’m all sorts of other things as well, and I don’t want that to be the only thing people think of me as.’ John’s grey cycling jacket is rather symbolic of his fleeting interactions with strangers, people who might see him in the pub after a cycle journey. John does not necessarily want to talk to such people, or even have any interaction with them at all, but is aware that a fluorescent cycling jacket very clearly positions him as a member of a particular group, as a cyclist, and he does not wish to be positioned so definitively by strangers.

In a similar way, John tries to avoid talking about the fact that he does not own a car.

‘I’m very careful to play it down as not being a moral stance or anything... just a lifestyle choice. I’m not preaching to people that they shouldn’t have one.’

Again, it appears that John tries to avoid being positioned on the basis of one particular characteristic or lifestyle choice, particularly by strangers. He actively takes steps to negotiate or shape the way he is positioned by others by altering certain elements of his behaviour. John wants to *belong*, even if superficially, to many social groups at the same time.

This wish to belong is shared by many of the interviewees, although the degree to which it shapes travel behaviour varies. John’s does not alter his travel behaviour, but rather his appearance, and the way he talks about his travel behaviour. For others, mobility behaviour may be altered to fit in.

Louise’s mobility behaviour is determined by her location, and she stays in that location because of a strong sense of belonging, and because of her emotional ties and associations from her childhood. Amanda chose a

community she felt she belonged in, and now feels differently about her mobility practices, although these have not changed. These experiences all link identity, interaction with others, and travel behaviour.

While John's sense of belonging is more defined in terms of what he does not want to belong to, and Louise's sense of belonging is rooted strongly in a geographical place, Amanda's sense of belonging is more linked to the people in the community she lives in. Amanda moved to the city where she had gone to university, and where she felt more comfortable. Her neighbourhood in this city was carefully chosen, and is much more suited to her values:

'I'm no different to anyone else here... here, I'm just the woman in the street. I just see myself as part of the puzzle now, because I'm not doing anything extraordinary, not round here.'

Amanda's community is a geographical community, but also a community of values. Amanda does not stand out, she is not positioned as unusual, but is accepted as part of the social group around her, which makes her feel more comfortable.

Amanda wished to feel like she belonged within the group of people, both known and unknown, that surrounded her, whereas Jim worries about keeping his position within the social group he is part of – a group of 'environmentalists' defined more by their shared values than geographical location. Jim has strong environmental values, a lot of his internal self is constructed around these values, he identifies himself as 'an environmentalist' and is therefore 'concerned about the environment', and worries that by look at a new housing development, thinking that 'the houses look quite nice and cosy', he is somehow giving up this position, being a traitor to his values and his social group. Jim thinks that

'maybe I shouldn't have approved of it, in a way, presumably those fields were a habitat, or there's various animals that can't live there any more.'

Jim gave up driving many years ago because of his environmental beliefs, but this sense of not wanting to give up a particular position, or working to appear 'normal' in relation to a social group, is one that is relevant to many people making travel decisions. It also illustrates the role of social relationships in shaping decisions – not only do people's individual relationships shape aspects of identity, but people are also affected by

more general social norms and pressure to conform in particular ways to the stereotypes of the social groups they belong to.

8.5 Conclusions

This chapter has explored the ways in which family, friends, and people in society in general can affect an individual's travel behaviour, both directly and through shaping aspects of their identity. The concept of positioning, of the reciprocal relationships between self and others, is strong here, people wish to feel accepted, to belong, and this can lead them to modify or adopt certain travel behaviours.

Experiences of travelling in childhood and adolescence can form the basis for opinions about travel in later life, particularly in relation to acquiring skills and confidence around cycling, for example, perhaps illustrating the positive role that could be played by encouraging the development of cycling skills in children. People often learn to drive as young adults, and this becomes positively associated with gaining independence from parents, starting employment and fostering new relationships. Driving, like cycling, is also a skill to be added to the internal self to draw upon later.

As it becomes normal to move further from family in adult life, there are issues around returning to visit parents, and the obligations this entails, particularly when family lives abroad, and especially when this conflicts with environmental values, causing contradictions with environmental values, and perhaps illustrating priorities.

Children bring particular obligations and influences on travel behaviour, both through negotiations around journeys that both parents and children must undertake, together and separately, and around the issues that travelling by certain modes of transport with children brings. These are dealt with differently by different people, according to other circumstances.

Overall, the influence of other people on both identity and travel behaviour is changeable over time – another illustration of the dynamic nature of identity and its influence on travel behaviour, and this cannot be captured through a simple analysis of values.

9. Conclusions

9.1 Introduction

This research began with a concern that increased environmental awareness was not being matched by a corresponding reduction in the rate of growth of the use of private motorised transport. It follows previous research around transport and environmentally significant behaviour, which has centred around either the value action gap (Barr, 2004, Barr and Gilg, 2005), or around segmentation approaches to understanding and categorising behaviour (Anable, 2005). This research has taken an approach more focused on individuals, with the aim of exploring how identity shapes travel behaviour at an individual level, with a particular interest in the role of environmental values, given their significance within behaviour change policy.

The research adopted a realist, social psychological perspective, focusing primarily on the individual and their travel behaviour, but with explicit recognition of their relational situation within the physical and social world. Using this type and depth of exploration elevates decisions around travel behaviour above the everyday question of 'shall we take the bus or the car?' Instead, it has enabled a thorough investigation of individual values, motivations, priorities and contradictions. And the result is a deeper understanding of how travel behaviour is played out within real lives.

The research used a revised form of Harré's standard model of identity as a conceptual framework. This has allowed a careful unpacking of the different elements of identity, to facilitate the building of a rounded picture of each individual. The value of the research lies in the juxtaposition of twelve individuals, in very different contexts and with very different identities. The research overall revealed that decisions around travel behaviour are made in similar ways despite variations in identity and circumstances. The intricate balance of values, priorities, practicalities, responsibilities, and contradictions is revealed through the analysis of identity and travel behaviour *within* each individual, and *across* all twelve individuals.

This final chapter of the thesis begins with a recap of the conceptual framework, emphasising the theoretical developments made throughout this research. Section 9.3 contains an outline of the themes emerging from

the empirical research: environmental values; the significance of place; relationships; and the changing nature of identity over time. Section 9.4 reflects on the conceptual framework, and asks how useful the conceptualisation of identity developed in this thesis is for research around travel behaviour. Following this, Section 9.5 discusses the wider implications of the research. Section 9.6 concludes the thesis.

9.2 The role of identity in shaping travel behaviour

The main question that this research set out to address is:

What is the role of identity in shaping travel behaviour?

The conceptual framework of this research is based on a revised form of Harré's standard model of identity, which is itself based on the way that people talk about identity in everyday speech. Harré's model postulates that a person has three 'selves': Self 1, the self of physical embodiment, that is, their existence as a single, individual person; Self 2, their reflection on themselves as a person, including their attributes and beliefs about those attributes; and Self 3, the way that an individual's Self 2 is manifested to others through social interaction. I have combined Harré's framework with Rorty and Wong's (1993, p19) notion of traits to develop a conceptualisation of identity with which to explore the role of identity in shaping travel behaviour. To recap from Chapter Four:

I conceptualise identity as including an individual's physical embodiment, as well as internal and external selves each with a series of elements including changing social circumstances, values, social roles, social groups, previous experiences, and memories.

Analytically the selves are distinct, but also interlinked, and this conceptual framework allows for the enduring yet fluctuating nature of identity to be explored along with the interactions between the selves and between the individual and the social world.

Chapters Six, Seven and Eight applied the conceptual framework of identity to an analysis of the relationships between identity and travel behaviour. In doing so, many interactions of the different aspects of identity were identified. The rest of Section 9.2 explores each of the selves in turn, presenting their role in shaping travel behaviour, as identified through the empirical research. This illustrates the ways in which aspects of identity

interact and shape travel behaviour for individuals. From this, the discussion will then widen to identify themes emerging from the research.

9.2.1 Self 1: physical embodiment

Self 1 is the point of view from which the individual perceives the material world (Sabat and Harré, 1992, p443). It is the self the individual refers to when using the word “I” (Harré, 1992, p53). It signifies physical embodiment, the inhabitation of a person within a single body. It therefore indicates stability over time, that an individual is one person, however many different aspects of themselves they may present in different situations. While aspects of Selves 2 and 3 change over time, Self 1 remains constant; the individual is always the same person.

From this perspective, Self 1 is a key part of explaining physical disability and travel behaviour. Travel behaviour is affected by the interactions between the physical body and the material world. Accessibility becomes an issue for a person who uses a wheelchair, for example, who is denied access to some places by virtue of this fact alone, and thus has constraints placed on their mobility that others do not have. Decisions around travel – where to travel, in particular – must be taken with these considerations in mind.

The boundaries between Selves 1 and 2 are blurred here; physical disability is a physical trait, and, as such, is part of Self 2, the person’s internal self. It is also a significant element of their physical embodiment, the physical body they inhabit, and yet it may be constant, or may change over time. However, the *person* is still the same.

9.2.2 Self 2: the internal self

Self 2 is the internal self – a person’s physical traits, dispositions, attributes, skills, memories, experiences, and beliefs about them all. The internal self is large and complex, and changes over time, as new memories, skills and experiences are added, and values and attributes shift. It is within the internal self that many of the aspects of identity which shape travel behaviour lie.

Attitudes towards transport modes are shaped by experiences of using those modes, and by reports from other people. Experiences build, and people draw on them to formulate their travel behaviour. Chapter Five

illustrated how people value similar things when they travel – convenience, independence, and flexibility, for example – but that individuals derive these from different modes of transport. Positive experiences of particular modes in childhood, particularly cycling and public transport, are associated with their use later in life. In contrast, lack of experience of cycling or public transport is associated with negative attitudes towards these modes, and a high perception of the dangers associated with them, and therefore makes it less likely that they will be considered as possible options.

There is also an element of how people perceive the time that they have in relation to travel, and this too is a function of different aspects of identity. The dispositional element of the internal self in particular effects people's perception of time. This corresponds to Urry's (2005) and Shove's (2002) discussions about the impact the system of automobility has on the perception of time. With the advent of the railway, 'modern clock time' (Urry, 2005, p29) standardised time keeping, bring people within a much more strict timeframe, regulating daily activities to a degree not seen before. Automobility has to some extent reversed this, car ownership meaning that people can be much more flexible with timetabling their own activities than before. This is not to say that this dictates people's travel behaviour, but gives them an availability of transport in a way not available before. It is not impossible to break out of this cycle of dependency on the car, but once that flexibility becomes engrained in the overarching framework within which people make travel decisions, it is difficult to let it go (Urry, 2005). The constant availability and flexibility of the car is perceived as one of its chief assets, and the inflexibility of public transport timetables is given as one of the primary reason people do not travel by public transport more often.

Roles that people inhabit as part of their internal can influence travel behaviour, and this is particularly the case with people's roles as parents. Chapter Eight illustrated the negotiations inherent in facilitating children's mobility, particularly for working parents. Negotiations must be made between parents, if both are available, and potentially with other family members, friends and employers. The complexities involved in these negotiations can override other factors that could potentially influence travel behaviour, such as environmental values. However, if environmental values are strong enough, an individual may be used to acting in accordance with

them, and the complexities and negotiations involved in travelling with children will be dealt with in the context of this framework.

The way roles are interpreted and enacted and the influence they have on travel behaviour is shaped by other aspects of identity. This is particularly pertinent with respect to travelling by public transport or cycling with young children. Experience of either of these modes reduces the perception of dangers associated with them; potential hazards become familiar, rather than unknown, and therefore easier to assess. This again introduces the significance of past experiences in creating positive associations to shape travel behaviour.

This also emphasises the importance of temporality in shaping travel behaviour. Perceptions of modes of transport change over the times of the day, but also over longer time periods. Values and physical capabilities shift over the life course, and experiences and memories are gained, which through the interaction of different elements of the internal and external selves, shape the overarching framework within which travel decisions are made.

9.2.3 Self 3: the external self

Self 3, the external self, is the way that an individual's Self 2 is manifested to others through social interaction. It concerns the way an individual positions themselves with the social relationships they have; the way that different aspects of the internal self are demonstrated to others. Self 2 and Self 3, the internal and external selves, are closely related, but separating them analytically allows for the separation of the role of being a parent, for example, from the way in which the role of 'parent' is performed by a particular person within the context of both their internal self, and their material and social worlds. This separation helps to tease out the issues involved.

Self 3 plays a key role in explaining the importance of a sense of belonging in shaping travel behaviour. People exist and are positioned within a web of social relationships, and feeling comfortable within these relationships has a significant influence on travel behaviour. Those with, for example, particularly strong environmental values which lead them to engage in certain travel behaviours may seek out those groups and situations where such behaviours are considered acceptable. Others may try to rationalise

their behaviour within the cultural norms of their current social relationships, or to alter aspects of their behaviour so as to fit in with these norms.

Where the concept of positioning plays the most significant role in shaping travel behaviour is in influencing an individual's experiences, and thus creating the boundaries of what is considered acceptable, or even possible. This research has demonstrated that familiarity with particular transport modes, particularly public transport and cycling, is associated with these being considered as an acceptable option to choose from, even if it not used regularly. If an individual is exposed to cycling as a child, they gain experiences and associations to draw from later in life; if others within their peer group cycle as adults, it becomes an acceptable transport option that can be used without one being considered unusual. In contrast, if an individual is to use a mode of transport considered unusual within their social network, there must be a strong motivation to do so. This may come from environmental values, or perhaps for financial reasons.

This emphasises the importance of the relational nature of identity to the way that people make travel decisions. Travel behaviour is bound within the context of people's lives, and these lives are filled with relationships with other people. People present aspects of themselves to others through the external self, but are also influenced by their membership of social groups, by the expectations and interpretations of social roles, such as parenthood or employment, and by the obligations that they have to others as part of those roles. Static approaches that target behaviour change policy at segmented groups of people do not allow for the complexity of these relationships, and the way that their development over time affects values and shifts the importance of various aspects of identity at various times.

This emphasises the importance of seeing travel behaviour as embedded within its wider contexts. This thesis has focused primarily on the individual, working outwards to emphasise the importance of situating them within their wider physical and social context. However, it also recognises the importance of the influence that wider context has on the individual, particularly through creating associations with different modes of transport, and dictating the availability of transport modes and facilities to travel to. In particular, issues of injustice in relation to pollution, both locally and globally, were raised as important factors in decision making, as well as inequality in terms of access to transport, or food shops, or facilities,

reflecting the notion that most people have a sophisticated understanding of the consequences of their decisions in a wider social context (Hobson, 2003).

9.2.4 Summary

This research has established that exploring identity is a valuable way of gaining further understanding of travel behaviour. The conceptual framework began with Harré's (1998, p60) standard model of identity, and added Rorty and Wong's (1993, p19) traits to form a conceptual framework of identity as being enduring and constant, but with elements of the internal self shifting over time with outside circumstances, and aspects of the internal self being presented in a variety of ways in different situations through the external self. These dynamic interactions between identity elements provide a complexity not found within the market segmentation approach to analysing environmentally significant behaviour, and allow travel behaviour to be explored at an individual level, within an individual's social and material circumstances. A key conclusion of this research is that identity forms an overarching framework within which everyday travel decisions are made. It is this framework that must be penetrated if travel behaviour is to be changed.

This research has allowed the complexity of the interaction between different elements of the internal self to be drawn out, to demonstrate the multitude of ways such interaction influences travel behaviour. It is necessary to consider both the individual and relational nature of identity; the way decisions around travel are filtered through individual circumstances, and also the way both those circumstances and travel behaviour are shaped by the demands and obligations of relationships with other people. This research also emphasises the significance of the role of spatiality in shaping identity and travel behaviour; the way that place influences identity development, and also forms decisions around travel behaviour. Time is also a significant factor, in three ways: (1) the way individuals organise the time, and have time constrained by obligations, employment and the availability of transport options; (2) the way that the time of day impacts on travel behaviour, by people feeling apprehensive about travelling or being in certain places at particular times of the day; and (3) the dynamic way that identity forms over time, having a changeable influence on travel behaviour.

What emerges from this operationalisation of the conceptual framework with these three individuals is the key conclusion of this thesis:

Identity is an overarching framework, shaped over time, which forms the parameters within which individuals perform their everyday travel behaviour.

Identity interactions do not, in general, influence the daily decisions between walking or driving, cycling or taking the bus; these are influenced by practical factors such as the weather, illness, or time scheduling. Instead, identity creates the overall parameters within which these decisions are made: whether someone owns a car or a bicycle; if public transport is even considered to be an option at all. It is in these overarching decisions, formed slowly and shifting over time, that the role of identity is paramount.

9.3 Themes emerging from the research

The key conclusion of this research is that personal identity, as it changes over time, forms an overarching framework within which everyday travel decisions are made. This framework of identity is made up of a combination of factors, outlined in Section 9.2, including physical embodiment, values, past experiences, memories, feelings, as well as the obligations associated with relationships with other people. This framework shapes 'higher level' decisions about whether an individual will learn to drive, for example, or decide not to use public transport. Everyday travel decisions, such as whether to drive or walk on a particular occasion, are made within this overarching identity framework.

The theme of environmental values was considered as significant in this research due to the emphasis placed on changing environmental values in travel behaviour change policy. Two other key themes, the role of place in shaping travel behaviour, and relationships with other people, emerged from the empirical research in answer to the research question, and together these three themes formed the basis of Chapters Six, Seven and Eight. The remainder of this section will address each of these themes in turn.

9.3.1 Environmental values

Every participant in this research had a sophisticated understanding of how their own travel behaviour fitted into the wider social and physical world and travel patterns in general. People were not ignorant of the environmental implications of their travel decisions, nor the social ones such as localised pollution and health implications (Burningham and Thrush, 2001). This demonstrates the necessity of behaviour change policy extending beyond educating people about the effects of their travel behaviour. As Hobson (2003, p105) points out, travelling is such a complex subject, people are already likely to have considered the debates around it; it is already in their discursive consciousness. People's decisions make sense *within the framework of their lives*, which is why it is so important to understand that framework of identity and the relational dimension of it in order to fully understand travel behaviour.

Environmental values were given prominence in this research to address the suggestion in previous research that encouraging positive environmental values leads directly to an increase in pro-environmental behaviour. This assumption has been problematised through research into the value action gap, which indicates that the relationship between values and actions is not necessarily straightforward and causative.

Chapter Six found that all values potentially influence behaviour, and understanding how and what values are prioritised in different circumstances can illustrate the importance of environmental values in particular to an individual. Environmental values jostle for priority with many others values, and at times they may conflict. When this happens, different values are prioritised within each situation. For some, environmental values are always prioritised, regardless of the situation. For others, the hierarchy is changeable depending on circumstances. Still others do not prioritise environmental values in their travel decisions, but are nevertheless pleased when their travel behaviour has a lower environmental impact. Individuals may engage in pro-environmental behaviour in some situations but not others, even when environmental values are strong. Values are prioritised within a framework containing not only other values, but also other aspects of the internal self, including disposition, past experiences, memories and skills. These play a significant role in influencing the role of values in shaping travel behaviour.

Whether or not environmental values influence travel behaviour depends on a number of factors, not least individual feelings of responsibility, and individuals' beliefs about their own ability to influence the social world. Macnaghten et al (1995, p82) argue that if individuals believe they have no capacity to influence, for example, the environmental impact of transport, then they have little inclination to act, at least not where the only intention would be to reduce that impact. If actions are believed to have no positive influence on the environment, then they are unlikely to be undertaken, even when combined with strong environmental values. However, it is important not to assume that pro-environmental behaviour must be underpinned by strong environmental values, as values change over time, and behaviour is shaped by a variety of factors.

While travel is an environmentally significant behaviour, in that the behaviour itself has an impact on the environment, it is often not undertaken with the intention of having that impact. This illustrates the importance of separating intention from impact, and in doing so, recognising that pro-environmental behaviour may be undertaken for many reasons, not all of which relate to the environmental impact. Chapter Six presented evidence that some pro-environmental behaviour is underpinned by an ethic of 'common sense', or what could perhaps be described as frugality. This is a desire to avoid wastefulness, which can lead to behaviours such as car sharing, and buying local food. This ethic has the potential to be greatly significant in encouraging pro-environmental behaviour, and is one which would benefit from further research.

Finally in relation to environmental values, this research has demonstrated the importance of the role other people play in both increasing knowledge and shaping environmental values, and in encouraging environmentally friendly actions. The development of environmental values in children and young people is influenced by parents and friends, and this appears to be particularly significant in developing strong positive attitudes towards nature. This research has illustrated that environmental values that are underpinned by a biospheric orientation (Stern, 2000), or concern for the environment itself rather than for the functional value it has for human beings, appear to have a stronger positive influence on travel behaviour in later life, as they appear less likely to be overridden by other values.

Environmental values are underpinned by a particular orientation (Stern, 2000). Environmental values that are underpinned by a biospheric orientation, or concern for the environment itself rather than for the functional value it has for human beings, appear to have a stronger positive influence on travel behaviour, as they appear less likely to be overridden by other values.

9.3.2 The significance of place

Chapter Seven demonstrated the relationships people have with the places they inhabit. These interactions are related to the way people inhabit their bodies, as discussed in section 9.2.1 above. The empirical research highlighted the strong significance of the relational, spatial and temporal elements of identity in shaping travel behaviour. Identity is constructed in relation to place (Hagman, 2004) and the spatiality of the reciprocal relationship between identity and place influences travel behaviour in a number of ways. Feelings towards particular places shape the way that people use them, as do the availability of shops, schools, and other facilities. Relationships to place are shaped over time, by ongoing changing elements of the places themselves, by shifts in values, and also are influenced by the time of day; some places become considered out of bounds at night because of fear of crime, for example.

The issues are complex and difficult to untangle, as the relationships between people and the places they inhabit are in some way reciprocal. To some extent, the influence of the physical environment on travel behaviour is dependent on identity, particularly for those with limited physical mobility. People with mobility problems, for example, which are a reality of their physical embodiment, have to deal with the physical structure of their surroundings, and this has a significant impact on their travel behaviour. This is also bound up with cultural issues – not providing the appropriate infrastructure for people with physical disabilities. Choices are restricted to those which are accessible, and accessible choices are determined by cultural factors.

Wider social structures shape the physical environment to influence the availability of public transport facilities, for example, and food shops, which, in turn, shape the travel behaviour of individuals. as friendly or threatening. People are also restricted by other elements of the material social world

which may, for example, discourage them from cycling – heavy traffic and a lack of cycle lanes perhaps. Some restrictions may be self imposed – people may feel that they are not fit enough to cycle, for example. In this sense, physical traits can be changed; people can work on improving their physical fitness through exercise. However, beliefs about physical fitness, and an individual's capabilities and motivations to improve it, are also shaped by people's positioning within their social groups, as well as more physical issues such as the topography of a place. If cycling is relatively common within a group, it appears more likely that a person will try it themselves. In addition, other aspects of the internal self, particularly past experience and positive memories, contribute to a person's beliefs about their own physical fitness, and therefore their inclination towards more active modes of transport.

This research has also demonstrated how travel behaviour can be shaped through the emotional attachments which people have to specific places – attachments which can form a significant part of the internal self, or Self 2. Feelings towards a place, and memories associated with it, influence the way in which people interact with a place and the people there. This can influence both where someone lives, and where they choose to travel to, which can each, in turn, affect travel behaviour.

Interaction between the internal and external selves, Selves 2 and 3, is demonstrated through the importance of a sense of belonging in a place, and with a set of people, even if they are not explicitly part of an individual's social circle. This can be an important element in making people feel comfortable in a place. Seeing familiar faces in the street can make a person feel less threatened, just as, in contrast, a sea of unfamiliar faces can make a place seem daunting and unappealing. The importance of feelings of belonging to a social group is a significant element of identity, particularly in relation to feeling at home within a certain geographical area and with other people who inhabit that area. This aspect of identity, of identifying with a place and its inhabitants, shapes travel behaviour indirectly by influencing the place that they live, which has an accompanying set of structural factors to shape travel behaviour, such as the availability of public transport facilities, or food shops.

Experiences of being in a place shape the feelings that people have towards that place, and therefore the likelihood that they will travel to be

there (Holloway and Hubbard, 2001, p75). Feelings of safety in places can be influenced by urban design, cleanliness, and the presence of authority figures. There is a general consensus among participants that litter and graffiti in a place make it less appealing, and can even make places feel threatening. In contrast, feelings of unfamiliarity and vulnerability can be mitigated by the presence of an authority figure, such as a conductor or guard, as also demonstrated by Valentine (1989, p387).

People are positioned by others within a place as being threatening or threatened, friendly or unfriendly. Elements of the internal self, such as physical traits, past experience and stereotypes associated with social groups combine with positioning in the social world to create feelings of vulnerability, and the positioning of others in relation to fear. This can inhibit use of public transport in particular. Young people in particular are often perceived as being under threat, for example from kidnappers or unfriendly people, but are equally often perceived as posing a threat themselves to other people, particularly the old and vulnerable, and particularly when they are in large groups, reflecting Valentine's (1996a) characterisation of children in public spaces as angels or devils. Someone's positioning of themselves as vulnerable, which may be to do with social expectations of age and gender, for example, or with past experiences of being threatened, can influence the way they behave in a place, or whether they use public transport, for example, as well as the way that they position other people as friendly or threatening. Such feelings of vulnerability and threat are associated with time. Time of day can have a significant influence in shaping how people feel about places, and how and where they are prepared to travel.

Overall, place was raised as a significant factor in shaping travel behaviour in this research because feelings about places shape where people are prepared to live, and travel to. Such feelings are influenced by aspects of identity, such as memories, associations with places, experiences, as well as feelings of belonging.

9.3.3 Relationships and other people

Chapter Eight illustrated the great significance of the relational nature of identity, often overlooked in travel behaviour research. People do not exist in isolation, and for all of the participants, the influence of social roles and

obligations associated with them is strong, and identity as a parent, in particular, can have a significant effect on travel behaviour, although this effect is filtered through other aspects of identity.

The role of family in shaping travel behaviour through childhood travel has been demonstrated in this research. Experiences of travelling while gaining independence as a child and young adult can be very formative in terms of both environmental values and transport habits. People who cycled a lot as a teenager are more likely to cycle now, as they feel more comfortable cycling and less frightened of accidents with other road users. The internal self, particularly in the form of memories and past experiences, can strongly influence the likelihood that a person will use active modes of transport, particularly if experiences have been positive. This suggests that there is benefit in encouraging children to cycle, and giving them positive experiences of cycling in childhood, which they will be able to draw on later in life.

Families also shape travel behaviour through the obligations that being a family member entails. Ease of travel is contributing to families becoming more spread out, which, in turn, contributes to the necessity of travelling further to visit family. This is particularly relevant for people who have family members living abroad, and this research has demonstrated that such people are likely to prioritise visiting family over environmental considerations when making travel plans, even when their environmental values are strong.

Being responsible for travelling with children can change people's priorities, particularly causing an increase in concern for safety. However, this manifests itself in different ways for different people, according to a combination of their environmental values, past experience etc, and their positioning within their social groups and society as a whole. Parental responsibilities can restrict the framework within which decisions around travel behaviour are made, particularly by constraining the available time. Obligations of this social role in particular often override environmental values.

The influence of other people on travel behaviour can also be seen in the desire to be positively positioned as belonging to a group of people, however widely defined. People in general want to feel that they fit in with

their social group, whether that is a geographical community or a group of friends. Conflicts can occur when internal values conflict with values expressed by the geographical group, making people feel vulnerable or excluded. In similar circumstances, the actions of groups or the majority of people in groups may encourage similar actions, such as cycling, in people who are unsure or who lack confidence.

9.3.4 Changes over time

The temporal nature of identity has transcended Chapters Six, Seven and Eight, and is shown to be an important theme in this exploration of identity and travel behaviour. Identity changes over time, and these changes in identity can bring changes in travel decisions. A person's physical embodiment, Harré's Self 1, remains constant, but aspects of Self 2, the internal self, shift over the life course, and Self 3, the external self, is portrayed in different ways throughout interactions. This is a vital element of the interaction between identity and travel behaviour, and is intertwined with the relational nature of identity. Individual circumstances change, family situations alter, employment obligations, location, and responsibilities all shift over time.

While population segmentation may identify someone as a young single person now, that person may change jobs, marry, have children, or change location to care for an aging parent. This change in circumstances will not necessarily cause them to shift to a specific new mobility strategy; they will bring with them to their new situation a trail of memories, experiences, habits, and expectations, perhaps a car, perhaps financial struggles precluding car ownership – all of which will shape their travel behaviour in their new circumstances. The dynamic nature of identity, this constant interaction of the elements of the internal self with outside circumstances is what makes travel decisions so complex, and makes it vital that both the relational and temporal natures of identity are understood if travel behaviour change is to be encouraged.

9.4 Reflections on the conceptual framework

This research began with the problem of why environmental values were seemingly not translated into action around travel behaviour. Approaches to researching this value action gap have taken several forms, most recently

adopting a market segmentation approach of segmenting the population into several groups and targeting policy interventions at each group according to their perceived motivations (for example, Anable, 2005). Using segmentation techniques taken from social marketing approaches, such research has divided the population into segments according to transport mode used, attitudes to various modes of transport, attitudes to environmental issues in general, or some combination of all three. Such techniques are based on an assumption that there is little point addressing an 'average consumer,' but rather that individuals will react to policy interventions in different ways as they are motivated by different things (Hobson, 2003, p66). They demonstrate a positive acknowledgement that the population as a whole does not behave in a homogenous manner when faced with policy interventions, and a recognition of the fact that individuals are motivated by different factors when making travel decisions.

One key advantage of segmentation techniques is that they suggest policy interventions that will potentially influence each of the segments. This increases the likelihood of policy measures to encourage pro-environmental behaviour will be effective for certain groups in the population. However, so far categories have been devised on the basis of travel behaviour, environmental values, or environmental behaviour more generally, and therefore have not had the capacity to cover all aspects of the motivations and reasons behind travel behaviour. There is little scope for changes over time; for contradictions in individual beliefs that may run over the assumptions of two or more categories; or for outside influences on individual behaviour. Categories are static, individuals are homogenous within them. Research using these approaches is positive in its recognition of difference within the overall population, but cannot investigate differences at an individual level.

This thesis has explored the use of a specific conceptualisation of identity in research into travel behaviour. Harré's standard model of identity, on which this research is based, has been used in a limited field of research (see, for example, Sabat, 2002, 2005, 2006 research into selfhood and Alzheimer's Disease), and this thesis has explored how this conceptualisation may be useful in research into individual travel behaviour.

This conceptualisation of identity has been useful in the following ways:

- with an emphasis on physical embodiment, individuals are situated within their material surroundings. This allows factors such as physical disability to be taken into consideration, as well as physical aspects of where people live.
- talking about past experiences, memories, and associations, as well as the presentation of the self in different situations, allows for conversations around changes over time. This recognises that identity is not static, and therefore the overarching framework within which individuals are making travel decisions also fluctuate over time.
- the ability to capture all elements of identity. The conceptualisation of identity recognises that there is an enduring element to identity, in that individuals remain the same person throughout their lives, but that self 2, the internal self, is a collection of experiences, memories, associations, values and skills built up over the lifetime. By exploring the different aspects of identity, we can explore the different elements that lead to travel behaviour. This conceptualisation of identity has the potential to be applied to other areas of research around behaviour change.

This research has emphasised the importance of exploring travel behaviour with its wider context. Context is important in terms of family and work situation, socioeconomic status, and location, for example, and this research has extended this to illustrate the importance of taking the context of personal identity into account. This is particularly important when thinking of past experiences and skills, which are part of the framework of identity within which travel decisions are made. This goes some way to explaining why people of the same age, gender, family situation, and income, for example, with similar environmental values, may act in different ways. The primary implication of this is to indicate the importance of developing skills and building a store of positive experiences of using environmentally friendly modes of transport during childhood to add to the identity framework for people to draw on in later life.

Regarding the issue of why environmental values are not translated into action around travel behaviour, this research has illustrated the importance of taking all aspects of identity into account, not just values. The gap between environmental values and specific actions makes sense if those

actions are not viewed in isolation, but rather within the context of the other actions people take in their lives. While travel behaviour is environmentally significant, in that it has an impact on the environment, it is often not undertaken with the environment in mind. At the same time, individuals are undertaking other actions, which may more strongly reflect their environmental values, and this research suggests that buying local food is considered important to many people. There is not necessarily a direct link between environmental values and particular behaviours; environmental values are just one part of the overarching framework of identity within which people make decisions. Compromises between environmental values and other aspects of identity make more sense when viewed in the context of other actions that individuals undertake.

The conceptualisation of identity developed in this research is useful for research into travel behaviour precisely because it allows environmental values to be viewed as just one aspect of the overarching framework of identity within which decisions around travel behaviour are made. Situating travel behaviour within this wider context allows for the complexities to be revealed.

9.5 Wider implications of the research

Given a conception of identity as an overarching framework within which individuals make decisions around travel behaviour, and the role that this identity framework plays in shaping travel behaviour, there are a number of wider implications for attempts to change travel behaviour.

- As environmental values underpinned by a biospheric ethic appear to be associated with pro-environmental travel behaviour in later life, it would be useful to investigate the promotion of environmental or nature education among young people as a means of instilling strong biospheric environmental values.
- Attempts to change travel behaviour should be mindful of the relational nature of identity and its role in shaping travel behaviour. This research has demonstrated that individuals have complex relationships around them, which can lead to obligations and constraints on their travel decisions. This is particularly relevant when people have young children, or who have close family living abroad. If environmental values are a particularly strong part of the overarching framework of identity,

then negotiations around children's mobility will take place within this framework and be influenced by it. If environmental values are not a particularly strong aspect of identity, then they will have less influence over travel behaviour. If people have close relatives living abroad, the importance of retaining these family ties appears strong – suggesting that family relationships are one of the more enduring aspects of the identity framework, and that their influence can override even strong environmental values if, for example, flying is necessary to visit relatives.

- The temporal nature of identity should be taken into account when encouraging pro-environmental travel behaviour. Environmental values and other aspects of identity change over time, so there is potential for them to be influenced. The Smarter Choices project suggests the potential for changing travel behaviour highest when life events indicate a change in transport use anyway – a change of job, for example, or children moving out of the family home. This research suggests that this may indeed be a useful strategy.
- This research suggests that familiarity with a mode of transport has the potential to encourage its use later in life. Learning a skill, for example cycling or using public transport, becomes an aspect of the internal self, and increases both confidence and the likelihood that the mode of transport will be considered as an acceptable option later in life. Familiarity and experience can particularly reduce perception of the dangers involved in cycling, even when people have been involved in accidents.
- Familiarity also creates a store of experiences and associations from which to draw when choosing how to travel. Without this store of experiences, a mode of transport can become solely associated with stereotypes, often negative, particularly if it is unusual within an individual's social network. Familiarity leads to the separation of cycling, for example, as activity from 'cyclist' as an abstract identity. This research has also demonstrated that people rarely only use one mode of transport; even if people predominantly use cars, there are certain journeys that they make by public transport. Increasing familiarity with a wider range of transport modes by encouraging their use at an early

age therefore leads to them being considered among the range of acceptable options later.

- This research demonstrated that people use public transport for specific journeys when they generally consider it unacceptable. There are therefore lessons to be learned about what makes these journeys acceptable. Avoidance of traffic is given as a significant reason for journeys, particularly at rush hour or to large cities with unfamiliar one way systems. There are also positive attractions – fast, direct train routes, for example. While improving the reliability of public transport may not encourage everyone away from cars, for certain journeys particularly those between large cities, they may have a significant role to play, particularly if they are reasonably priced. This may also involve considering the layout of cities to make, for example, park and ride facilities available at prominent locations.
- The research illustrated that many people use more than one mode of transport on a regular basis for some journeys, even if they have one mode that they use most frequently. This demonstrates the danger of referring to people as ‘motorists’ or ‘cyclists’, as this risks simplistic categorisation and assumptions about behaviour and motivations in the same way as segmentation. There is an argument for the explicit separation of the action – driving, or cycling – from the identity – motorist, or cyclist. Presenting cycling, for example, as a transport option, rather than a lifestyle choice, would perhaps lead to a widening of the range of acceptable transport options for people. This suggests that attempts to change personal behaviour should be accompanied by information about the positive effects of the encouraged behaviour, for example the positive health and financial benefits of active modes of transport such as walking and cycling.

This research also has implications for research around travel behaviour in particular, and encouraging pro-environmental behaviour more generally. My research has found, with some theoretical development, that this is a useful model for the investigation of travel behaviour. As in Sabat’s research, the nature of the conceptualisation of identity requires a qualitative, in-depth approach, which enables the relational, historical elements of individuals’ identity, the changes over time to be explored, and the individual to be situated within the physical and social context of their

lives. Self-directed photography was an excellent way of giving some control over the research process to the participants themselves (Dodman, 2003) and provided a good and less arduous alternative to travel diaries for providing information for use in the interviews.

The use of the vignettes to introduce the participants to the reader contributed to a way of understanding storied identities, seeing the complex whole of a person and taking the idea of difference beyond the simplicity of categories. Much existing research around environmental behaviour change uses questionnaires and more quantitative methods. The two phased qualitative approach taken for this research, using self directed photography in combination with in depth interviews, encouraged positive engagement with the research experience and allowed participants to explore their own feelings around identity and travel behaviour. Important aspects of their lives were revealed to impact on travel decisions that were not part of the original research framework. The methods employed for this research have made a valuable contribution to its depth and focus.

9.6 Concluding remarks

The aim of this research was to explore how identity shapes travel behaviour at an individual level, with a particular interest in the role of environmental values given their significance within environmental behaviour change policy. It has established that identity forms an overarching framework within which decisions around travel behaviour take place, and indicates that pro-environmental travel behaviour can be encouraged by influencing this framework. There are a number of ways this can be done, including by encouraging the development of skills such as cycling in childhood, and encouraging the use of public transport in childhood to create a store of experiences and positive associations which become part of the framework, and can shape travel behaviour later in life.

This conceptual framework has potential for application outside the field of travel behaviour research. This research has indicated that consuming local food is considered as a positive environmental behaviour, one which relates to environmental values for individuals. The use of this framework to explore other environmentally significant behaviours such as food consumption and waste disposal could build a more comprehensive picture of how identity influences behaviour, and how to influence identity itself.

References

Adey, P. and Bevan, P. (2004) "Connected mobility?" Paper prepared for Alternatives Mobilities Conference, Lancaster University. Published online at http://www.lancs.ac.uk/fass/centres/cemore/pastevents/altmobs/adeybevan_s.doc Accessed 22nd October 2009

Alcoff, L.M. (2000) "Who's afraid of identity politics?" in: Moya, P. and Hames-Garcia, M. (eds) Reclaiming Identity: Realist Theory and the Predicament of Postmodernism London: University of California Press

Anable, J. (2005) "'Complacent car addicts' or 'aspiring environmentalists'? Identifying travel behaviour segments using attitude theory" *Transport Policy* 12: 65-78

Ajzen, I. and T. J. Madden (1986). "Prediction of goal-directed behaviour: attitudes, intentions, and perceived behavioural control." *Journal of Experimental Social Psychology* 22: 453-474.

Bamberg, S. (2003) "How does environmental concern influence specific environmentally related behaviours? A new answer to an old question" *Journal of Environmental Psychology* 23: 21-32

Banister, D. (1994). Transport Planning. London: Spon

Banister, C., Turner, J., Richardson, T., and Young, S. (2000). Unravelling the Transport Web: Delivering the New Transport Realism in a Complex Policy Environment. London, Landor.

Banister, D. (2005) Unsustainable Transport: City Transport in the New Century. Routledge: Abingdon

Barr, S. (2004) "Are we all environmentalists now? Rhetoric and reality in environmental action" *Geoforum* 35(2): 231-249

Barr, S. and Gilg, A.W. (2005) "Conceptualising and analysing household attitudes and actions to a growing environmental problem: development and application of a framework to guide local waste policy" *Applied Geography* 25: 226-247

Boxer, L. (2003) "Assessment of quality systems with positioning theory" In: Harré, R. and Moghaddam, F. (eds) The Self and Others: Positioning Individuals and Groups in Personal, Political and Cultural Contexts Westport: Praeger Publishers

Bradley, K. (2009) Just Environments: Politicising Sustainable Urban Development PhD Thesis. Sweden: Royal Institute of Technology. Published online at: <http://www.infra.kth.se/~bradley/BradleyPhD.pdf> Accessed 22nd October 2009

Bulkley, H. and Rayner, T. (2003) "New realism and local realities: local transport planning in Leicester and Cambridgeshire." *Urban Studies* 40(1): 35-55

Burningham, K. and Thrush, D. (2001) Rainforests are a long way from here: the environmental concerns of disadvantaged groups York: Joseph Rowntree Foundation

Carrabine, E. and Longhurst, B. (2002) "Consuming the car: anticipation, use and meaning in contemporary youth culture." *Sociological Review* 50(2): 181-196.

Cope, M. (2003) "Coding transcripts and diaries" In: Clifford, N.J. and Valentine, G. (eds) Key Methods in Geography London: Sage

Cycling England (2009) 'Lift Off' for Cycling: Cycling Demonstration Towns Report. Published online at <http://www.dft.gov.uk/cyclingengland/site/wp-content/uploads/2010/03/lift-off-for-cycling1.pdf> Accessed 16th October 2010.

Darnton, A. (2004) Driving Public Behaviours for Sustainable Lifestyles: Report 2 of Desk Research Commissioned by COI on behalf of DEFRA

Davies, B. and Harré, R. (1990) "Positioning: the discursive production of selves" *Journal for the Theory of Social Behaviour* 20(1): 43-63

Dear, M., Wilton, R., Lord Gaber, S., Takahashi, L. (1997) "Seeing people differently: the sociospatial construction of disability" *Environment and Planning D: Society and Space* 15: 455-480

Demos/ Green Alliance (2003) Carrots, Sticks and Sermons: Influencing Public Behaviour for Environmental Goals A Demos/Green Alliance report for DEFRA

Department for Communities and Local Government (DCLG) (2001) Planning Policy Guidance 13: Transport Published online at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155634.pdf> Accessed 21st October 2009

Department for Communities and Local Government (2005) Planning Policy Statement 6: Planning for Town Centres Published online at <http://www.communities.gov.uk/documents/planningandbuilding/pdf/147399.pdf>

Accessed 21st October 2009

Department for Communities and Local Government (2007) Planning Policy Statement: Planning and Climate Change. Supplement to Planning Policy Statement 1 Published online at <http://www.communities.gov.uk/documents/planningandbuilding/pdf/ppscclimatechange.pdf> Accessed 21st October 2009

Department for Environment, Food and Rural Affairs (DEFRA) (2003) Development of the UK's Campaign to Stimulate Public Action to Protect the Environment Published online at: <http://www.oecd.org/dataoecd/29/19/2397715.pdf> Accessed 22nd October 2009

Department for Environment, Food and Rural Affairs (DEFRA) (2008) A Framework for Pro-Environmental Behaviour London: HMSO

Department for Environment, Food and Rural Affairs (DEFRA) (2010) [TITLE??? <http://ww2.defra.gov.uk/corporate/about/> accessed 8th October 2010

Department of the Environment, Transport and the Regions (DETR) (1998) A New Deal for Transport: Better for Everyone London: HMSO

Department for Transport (DfT) (2000) Transport 2010: The 10-Year Plan Published online at: <http://www.dft.gov.uk/adobe/pdf/165259/tenyearplan> Accessed 19th October 2009

Department for Transport (DfT) (2004) The Future of Transport London: HMSO

Department for Transport (DfT) (2007) Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World Published online at <http://www.dft.gov.uk/about/strategy/transportstrategy/pdfsustaintranssystem.pdf> Accessed 21st October 2009

Department for Transport (DfT) (2009a) Public Attitudes Towards Climate Change and the Impact of Transport: 2006, 2007 and 2008 Published online at:

<http://www.dft.gov.uk/adobepdf/162469/221412/221513/4387741/climatechngandtransport.pdf> Accessed 20th October 2009

Department for Transport (DfT) (2009b) Transport Trends 2008 Edition
Published online at:

<http://www.dft.gov.uk/adobepdf/162469/221412/190425/220778/trends2008.pdf> Accessed 20th October 2009

DfT (2009) Public experiences of home working and internet shopping
(section 3.2.2)

Department for Transport, Local Government and the Regions (DTLR)
(2002) Attitudes to, and Potential Take Up of, Additional Home to School
Transport Published online at:

<http://www.dft.gov.uk/pgr/sustainable/schooltravel/research/attitudestoandpotentialtakeu5747?page=1#a1000> Accessed 22nd October 2009

Department of the Environment (DoE) (1995) The Going for Green Initiative
Published online at: <http://www.iisd.ca/consume/green.html> Accessed 22nd
October 2009

Department of Transport (DoT) (1987) Policy for Roads in England London:
HMSO

Department of Transport (DoT) (1989) Roads for Prosperity London: HMSO

Dietz, T., Fitzgerald, A., and Shwom, R. (2005) "Environmental values"
Annual Review of Environment and Resources 30: 335-372

Dodman, D.R. (2003) "Shooting in the city: an autophotographic exploration
of the urban environment in Kingston, Jamaica" *Area* 35(3): 293-304

Doherty, B. (1998) "Opposition to road-building" *Parliamentary Affairs*
51(3): 370-383

Donkin, A., Dowler, E., Stevenson, S., Turner, S. (1999) "Mapping access
to food at a local level" *British Food Journal* 101(7): 554-564

Dowler, E., Turner, S., and Dobson, B. (2001) Poverty Bites: Food health
and Poor Families London: Child Poverty Action Group

Featherstone, M. (2005) "Automobilities: an introduction" In: Featherstone,
M., Thrift, N. and Urry, J. (eds) Automobilities London: Sage

Fishbein, M. and Ajzen, I. (1975) Belief attitude intention and behaviour: an introduction to theory and research Reading, MA, Addison-Wesley.

Fotel, T. and Thomsen, T.U. (2004) "The surveillance of children's mobility" *Surveillance and Society* 1(4): 535-554

Freudendal-Pederson, M. (2005) "Structural stories, mobility and (un)freedom" In: Thomsen, T.U., Nielson, L.D. and Gudmundsson, H. (eds) Social Perspectives on Mobility Aldershot: Ashgate

Friends of the Earth (2001) Environmental justice: mapping transport and social exclusion in Bradford London, Friends of the Earth

Friends of the Earth (2008) The United Nations Framework Convention on Climate Change and Kyoto Protocol: An Introduction Published online at: http://www.foe.co.uk/resource/briefing_notes/kyoto_protocol_introduction_d ec08.pdf Accessed 20th October 2009

Giddens, A. (1984) The Constitution of Society: Outline of the Theory of Structuration Cambridge: Polity Press

Giddens, A. (1991) Modernity and Self Identity: Self and Society in the Late Modern Age Cambridge: Polity Press

Goodwin, P. (1999) "Transformation of transport policy in Great Britain." *Transportation Research Part A* 33: 655-669

Goodwin, P., Hallet, S., Kenny, F. and Stokes, G. (1991) Transport: The New Realism Report to the Rees Jeffreys Road Fund. Transport Studies Unit: University of Oxford

Goffman, E. (2001 [1959]). The Presentation of the self in Everyday Life. In: Branaman, A. (ed) Self and Society. A. Branaman. Oxford, Blackwell.

Hagman, O. (2004) "Alternative mobilities in the networking of everyday life." Paper prepared for Alternative Mobilities conference, Lancaster University Published online at: <http://www.lancs.ac.uk/fass/centres/cemore/pastevents/altmobs/hagman.pdf> Accessed 19th October 2009

Halpern, D., Bates, C., Mulgan, G., and Aldridge, S., Beales, G. and Heathfield, A. (2004) Personal Responsibility and Changing Behaviour: the

State of Knowledge and its Implications for Public Policy London: Prime Minister's Strategy Unit

Hamberg, K., Johansson, E. Lindgren G. and Westman, G. (1994) "Scientific rigour in qualitative research: examples from a study of women's health in family practice." *Family Practice* 11(2): 176-181

Harré, R. (1991) "The discursive production of selves." *Theory and Psychology*. 1(1): 51-63

Harré, R. (1998) The Singular Self: An Introduction to the Psychology of Personhood London: Sage

Harré, R. (2001) "Metaphysics and narrative: singularities and multiplicities of self." In: Brockmeier, J. and Carbaugh, D. (eds) Narrative and identity: studies in autobiography, self and culture. John Benjamins Publishing Co: Amsterdam

Harré, R. and van Langenhove, L. (1991) "Varieties of positioning" *Journal for the Theory of Social Behaviour* 21(4): 393-407

Highways Agency (2009) Tackling Congestion by Influencing Travel Behaviour Published online at: <http://www.highways.gov.uk/knowledge/9561.aspx> Accessed 19th October 2009

Hincliffe, S. (1996) "Helping the earth begins at home: the social construction of socio-environmental responsibilities" *Global Environmental Change* 6(1): 53-62

HM Government (2005) Securing the Future: Delivering the UK Sustainable Development Strategy London: HMSO

Hobson, K. (2001) "Sustainable lifestyles: rethinking barriers and behaviour change" In: Cohen, M.J. and Murphy, J. (eds) Exploring sustainable consumption: environmental policy and the social sciences London: Pergamon

Hobson, K. (2003) "Thinking habits into action: the role of knowledge and process in questioning household consumption practices" *Local Environment* 8(1): 95-112

Hockey, J. and James, A. (2003) Social Identities Across the Lifecourse London: Palgrave Macmillan

Hogg, M. A. and G. M. Vaughan (2002). Social Psychology. London, Prentice Hall.

Holloway, L. and Hubbard, P. (2001) People and Place: The Extraordinary Geographies of Everyday Life Essex: Pearson Education Ltd

Horton, D. (2007) "Fear of cycling" In: Horton, D., Rosen, P. and Cox, P. (eds) Cycling and Society Ashgate: Aldershot

Horton, D., Cox, P. and Rosen, P. (2007) "Introduction" In: Horton, D., Rosen, P. and Cox, P. (eds) Cycling and Society Ashgate: Aldershot

Hunecke, M., Haustein, S., Grishkat, S. and Böhler, S. (2007) "Sociodemographic and infrastructural determinants of ecological impact caused by mobility behaviour" *Journal of Environmental Psychology* **27**: 277-292

Imrie, R. (1996) Ableist geographies, disablist spaces: towards a reconstruction of Golledge's "Geography and the disabled." *Transactions: Institute of British Geographers*. 21: 397-403.

Jackson, P. (2001) "Making sense of qualitative data" In: Limb, M. and Dwyer, C. (eds) Qualitative Methodologies for Geographers: Issues and Debates London: Arnold

Jackson, T. (2005) Motivating Sustainable Consumption: A Review of Evidence on Consumer Behaviour and Behavioural Change London: Report to the Sustainable Development Research Network (SDRN)

Jenkins, R. (2008) Social Identity (3rd edn) London: Routledge

Jones, P., Roberts, M. and Morris, L. (2007) Rediscovering Mixed-Use Streets: The Contribution of Local High Streets to Sustainable Communities York: Joseph Rowntree Foundation

Jones, S.R. and McEwan M.K. (2000) "A conceptual model of multiple dimensions of identity." *Journal of College Student Development* 41(4): 405-414

Kaplan, S. (2000). "Human Nature and Environmentally Responsible Behaviour." Journal of Social Issues **56**(3): 491-508.

Kearney, C. (2003) The Monkey's Mask: Identity, Memory, Narrative and Voice Stoke on Trent: Trentham Books Ltd

Kenyon, S. and Lyons, G. (2003) "The value of integrated multimodal traveller information and its potential contribution to modal change" *Transportation Research Part F* 6: 1-21

Kesselring, S. (2006) "Pioneering mobilities: new patterns of movement and motility in a mobile world." *Environment and Planning A* 38: 269-279.

Laurier, E. (2005) "Doing office work on the motorway." In: Featherstone, M., Thrift, N. and Urry, J. (eds) Automobilities London: Sage

Leopold, A. (1949(1968)) A Sand County Almanac London: Oxford University Press

Levine, J. and Garb, Y. (2002) "Congestion pricing's conditional promise: promotion of accessibility or mobility?" *Transport Policy* 9: 179-188

Lofland, J. (1971) Analysing Social Settings Belmont, CA: Wadsworth

Lucas, K., Brooks, M., Darnton, A. and Jones, J.E. (2008) "Promoting pro-environmental behaviour: existing evidence and policy implications" *Environmental Science and Policy* 11: 456-466

Mannetti, L., Pierro, A. and Livi, S. (2004) "Recycling: planned and self-expressive behaviour" *Journal of Environmental Psychology* 24:227-236

Matthews, S. (1979) The Social World of Older Women: Management of Self-Identity London: Sage

Miller, D. (2001) "Driven societies." In: Miller, D. (ed) Car Cultures. Oxford: Berg.

Ministry of Transport (1963) Traffic in Towns London: HMSO

Moya, P. (2000) "Introduction: Reclaiming Identity" In: Moya, P. and Hames-Garcia, M. (eds) Reclaiming Identity: Realist Theory and the Predicament of Postmodernism London: University of California Press

Naess, P. and Jensen, O.B. (2004) "Urban structure matters, even in a small town" *Journal of Environmental Planning and Management* 47(1): 35-57

The National Digital Archive of Datasets, 2007,
<http://www.ndad.nationalarchives.gov.uk/AH/14/detail.html>, accessed 8th October 2010

Owens, S. (1995) "From 'predict and provide' to 'predict and prevent': pricing and planning in transport policy." *Transport Policy* 2(1): 43-49

Pain, R.H. (1997) "Social geographies of women's fear of crime." *Transactions: Institute of British Geographers*. 22: 231-244

Pain, R.H. (2001) "Gender, race, age and fear in the city." *Urban Studies*. 38: 899-913

Patton, M. (1990) Qualitative Evaluation and Research Methods (2nd Edition) London: Sage

Prillwitz, J. and Barr, S. (2009) 'Leaving sustainability behind: similarities and differences between lifestyles and travel choices.' Presentation given to the annual meeting of the Association of American Geographers, Las Vegas. Published online at:
<http://geography.exeter.ac.uk/prost/Downloads/AAG-JP-Lifestyles-Travel.pdf> Accessed 9th September 2010

Riessman, C. (2003) "Performing identities in illness narrative: masculinity and multiple sclerosis" *3*(1): 5-33

Rorty, A.O. and Wong, D. (1993) "Aspects of identity and agency" In: O'Flanagan and Rorty, A.O. (eds) Identity, Character and Morality: Essays in Moral Psychology Cambridge, MA: MIT Press

Sabat, S.R. (2002) "Surviving manifestations of selfhood in Alzheimer's Disease: a case study." *Dementia* 1: 23-36

Sabat, S.R. (2005) "Capacity for decision-making in Alzheimer's Disease: selfhood, positioning and semiotic people" *Australian and New Zealand Journal of Psychiatry* 39: 1030-1035

Sabat, S.R. (2006) "Mild cognitive impairment: what's in a name?" *Philosophy, Psychiatry and Psychology* 13(1): 13-20

Sabat, S.R. and Harré, R. (1992) "The construction and deconstruction of self in Alzheimer's Disease." *Ageing and Society*. 12: 443-461

Shaw, J. and Walton, W. (2001) "Labour's new trunk-roads policy for England: an emerging *pragmatic multimodalism*?" *Environment and Planning A* 33: 1031-1056.

Sheller, M. (2004) "Automotive emotions: feeling the car" *Theory, Culture and Society* 21(4): 221-242

Sheller, M. and Urry, J. (2003) "Mobile transformations of 'public' and 'private' life." *Theory, Culture and Society* 20(3):107-125.

Shove, E. (2002) "Rushing around: coordination, mobility and inequality." Draft paper for the Mobile Network Meeting. Published by The Department of Sociology, Lancaster University at: <http://www.lancs.ac.uk/fass/sociology/papers/shove-rushing-around.pdf>
Accessed 20th October 2009

Silverman, D. (2000) Doing Qualitative Research: A Practical Handbook London: Sage

Skinner, D. and Rosen, P. (2007) "Hell is other cyclists: rethinking transport and identity. In: Horton, D., Rosen, P. and Cox, P. (eds) Cycling and Society Ashgate: Aldershot

Sparkes, C. (2002) "Fictional representations: on difference, choice and risk" *Sociology of Sport Journal* 19: 1-24

Spinney, J. (2007) "Cycling and the city: non-place and the sensory construction of meaning in a mobile practice." In Horton, D., Rosen, P. and Cox, P. (eds) Cycling and Society Ashgate: Aldershot

Standing Advisory Committee on Trunk Road Assessment (SACTRA) (1994) Trunk Roads and the Generation of Traffic

Stern, P.C. (2000) "Toward a coherent theory of environmentally significant behaviour" *Journal of Social Issues* 56(3): 407-424

Stets, J.E. and Biga, C.F. (2003) "Bringing identity theory into environmental sociology" *Sociological Theory* 21(4): 398-423

Stone, G., Giles-Corti, B., McBride, S. and Jackson, B. (2003) "Walk it, bike it, bus it': perceptions of active modes of transport" *World Transport Policy and Practice* 9(3): 15-25

Thomsen, T.U. (2004) "Children – automobility's immobilized others?" *Transport Reviews* 24(5): 515-532

Urry, J. (2000) Sociology Beyond Societies: Mobilities for the Twenty first Century. London: Routledge.

Urry, J. (2005) "The 'system' of automobility" In: Featherstone, M., Thrift, N., and Urry, J. (eds) Automobilities. London: Sage.

Valentine, G. (1989) "The geography of women's fear" *Area*. 21(4): 385-390

Valentine, G. (1996a) "Angels and devils: moral landscapes of childhood" *Environment and Planning D: Society and Space* 14(5): 581-599

Valentine, G. (1996b) "Children should be seen and not heard: the production and transgression of adults' public space" *Urban Geography* 17(3): 205-220

Vigar, G. (2000) "Local 'barriers' to environmentally sustainable transport planning." *Local Environment* 5(1): 19-32

Vigar, G. (2002) *The Politics of Mobility: Transport, the Environment and Public Policy*. Spon Press: London

Walton, W. and Shaw, J. (2003) "Applying the new appraisal approach to transport policy at the local level in the UK." *Journal of Transport Geography* 11: 1-12

Whelan, A., Wrigley, N., Warm, D. and Cannings, E. (2002) "Life in a 'food desert'" *Urban Studies* 39(11): 2083-2100

Whitelegg, J. (1997) Critical Mass: Transport, Environment and Society in the Twenty First Century. London: Pluto Press in association with WWF.

Wright, C. and Curtis, B. (2005) "Reshaping the motor car." *Transport Policy* 12: 11-22.

Wright, C. and Egan, J. (2000) "De-marketing the car." *Transport Policy* 7:
287-294

Appendix 1: Table of participants' characteristics

Name	Gender/ Age	Location	Family and work situation	Transport modes used
Emma	Female, late 20s	Lives near to large city on the edge of rural area	Lives with husband. Works full time.	30 minute commute to work by train, most other journeys by car
Dan	Male, late 20s	Lives near to city centre	Lives with sister in shared house. Required to travel lots around the country for work	Lots of travel for work using van to transport tools, many other journeys on foot
Ingebjorg	Female, mid 30s	Just moved to new area of large Danish city	Pregnant, lives with husband and two young children. Works full time.	Travels to work by car, takes children to kindergarten on the way
Helsa	Female, late 40s	Lives in city in Sweden	Lives with teenage son. Works full time.	Cycles to train station and commutes to work by train
Louise	Female, mid 40s	Lives on the edge of small industrial town	Lives with husband and young daughter. Works for one hour in middle of day.	Walks daughter short distance to school, most other journeys by car
Lindsay	Female, early 50s	Lives on the edge of small industrial town	Lives with husband and two teenage children. Works full time.	All journeys by car
John	Male, late 40s	Lives in large city	Lives with wife and adult son. Other son and daughter live abroad. Works full time.	Most journeys by bicycle, longer distance by train
Paul	Male, mid 30s	Lives in large city	Lives alone, father lives in Jamaica. Does occasional voluntary work.	Shorter journeys using wheelchair, most other journeys using van
Donald	Male, early 70s	Lives in city with high rate of cyclists	Lives with wife. Retired, does some voluntary work.	Local journeys by bicycle, longer distances using combination of bicycle and train
Amanda	Female, late 30s	Lives in city with high rate of cyclists	Single parent to two young children. Does some voluntary work.	Local journeys by bicycle, bus or on foot, longer distances by train
Jim	Male, late 30s	Lives in rural area	Lives alone. Works part time.	Local journeys on foot, longer

		on canal		distances mostly by bus
Andrew	Male, early 40s	Lives in city	Lives with wife and three young daughters. Works full time from home.	Takes daughters to school using several bicycles, many other journeys by car

Appendix 2: Participant information sheet

What is this research about?

This research is for my PhD in the Department of Town and Regional Planning at the University of Sheffield. It's about the way that people travel in their daily lives, and what influences this. I'm looking at:

- How people travel, and why they travel in that way
- How people see themselves, and present themselves to others, in relation to how they travel
- How and what people think about 'the environment'
- How people interact with 'the environment'
- Awareness of environmental messages surrounding travel, and how these influence decisions

As part of my research I will be reviewing the methods I use as I go along. I would welcome your comments on how I'm conducting the research.

What will you be asked to do?

I have given you a disposable camera, and will ask you to take photographs on one journey that you make. You will be given more guidelines about what to take photographs of, but you won't be asked to take photos of people. I'll then ask you to return the camera or photographs to me.

After a couple of days I'll want to talk to you about the photographs that you have taken, and other aspects of the way that you travel. This should take around an hour.

I'll then transcribe the interview, and I may ask you for another interview after a few days. This will be to talk over my interpretation of what happened in the first interview, and to ask any other questions that arise.

What will happen to the information you give?

All information kept by me – including your photographs – will be anonymous. I will keep your name only for my own records. You will not be identified by name to my supervisors, or in my PhD or anything else I write using this information.

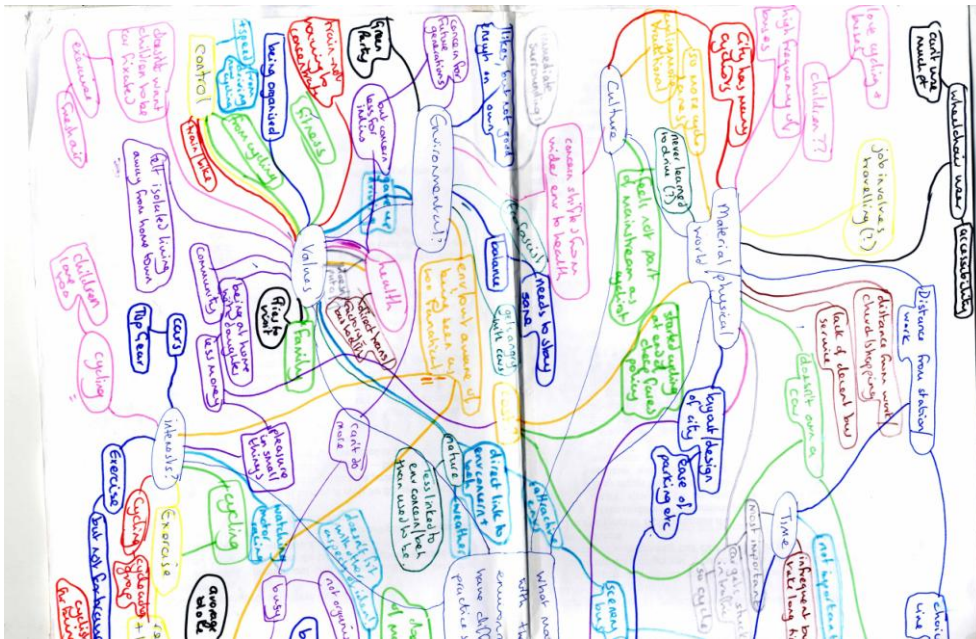
I will type out a full transcript of the interview, but this will be seen only by me and my supervisors. I may use selected quotes in my PhD, but you will never be identified by name.

How can you contact me?

If you have any further questions about being involved with this research please contact me either by:

- **Email:** j.brooks@sheffield.ac.uk
- **Telephone:** (0114) 222 6913

Appendix 3: Mind map of analysis codes



Appendix 4: Participant travel behaviour and environmental values				
Name	Location and household situation	Key journeys	Sample environmental values	Significant obligations and time constraints
Emma	Lives near to large city on the edge of the countryside with husband. They share one car.	30 minute commute to work by train. Default use of car for most other journeys. Travels by train to other major cities.	'I'm pleased when I'm travelling in an environmentally friendly way, but I wouldn't choose my transport based on it'.	Busy full time job.
Dan	Lives near to city centre with friends. Has constant access to company vehicle.	Lots of travel for work using van to transport tools. Most other journeys on foot, or occasionally bicycle.	'I'm aware of the environmental impact of driving, but I'm not motivated to do anything about it because it would cost time and money'.	Job involves extensive driving around country.
Ingebjorg	Just moved to new area of large Danish city. Lives with husband and two young daughters. They share a car.	Travels to work by car, often takes children to kindergarten on the way. Occasional use of bus for excursions with children.	Concern for daughters' health leads to buying organic food, but 'the environment doesn't mean anything in the transport area'.	Must negotiate with husband around taking children to kindergarten as they both work full time.
Helsa	Lives in city in Sweden with teenage son.	Cycles to train station and commutes to work by train.	Very 'cautious' about the environment, 'but I'm aware that sometimes it's difficult, and I'm very aware of being seen as too fanatical'.	Moved to be near family and because of money, but now work is over an hour away by train. Would like a car but cannot afford one.

Louise	Lives on the edge of small industrial town with husband and young daughter. Two cars in household.	Walk with daughter short distance to school. Most other journeys by car.	'I don't always try very hard, but sometimes my conscience gets me. Why do you fly in stuff you can get down the road? It seems silly!'	Must take daughter to and from school each day, and also works at daughters school for one hour each lunchtime.
Lindsay	Lives on the edge of small industrial town with husband and two of her teenage children. Two cars in household.	All journeys by car.	'I'd use the car less if we had a public transport system that worked'	Works full time. Active church member at church several miles away. Takes older teenagers to visit friends and to work.
John	Lives in large city with wife and youngest teenage son. Sold only car several months ago.	Most journeys by bicycle, longer distances by train.	'I do all the things you're supposed to... I feel some sense of moral responsibility' – but would not consider not visiting daughter while she's abroad	Eldest son and daughter live abroad.
Paul	Lives alone in large city. Has a van which his carers drive.	Shorter journeys using wheelchair, most other journeys using van with carer driving.	'It's hypocritical to be part of the Green Party but still fly' – but flies to visit father.	Father lives in Jamaica.
Donald	Lives in large city with wife. They have one car.	Local journeys by bicycle, longer distances using combination of bicycle and train	Sense of moral superiority – 'I'm doing something better for the world than people who are driving round in SUVs and things'	Retired, no significant time constraints or family obligations.
Amanda	Lives with two young sons in large city.	Local journeys by bicycle, bus or on foot, longer distances by train.	Partner calls her an eco-fascist, 'there's no pollution being released when I cycle, whereas cars are chucking out all sorts of stuff'.	Single parent to two young children, walks with them to and from school each day.

Jim	Lives alone in rural area on canal.	Local journeys on foot, longer distances mostly by bus.	'by flying everywhere I'd be destroying, or contributing in a very real way to the destruction of things that are important, that are part of me'	Works part time, but no significant time constraints or family obligations.
Andrew	Lives in large city with wife and three daughters. One car in household.	Takes daughters to school using several bicycles, many other journeys by car	'When we don't use the bikes, we're impinging on the wellbeing of the world', but this is lower in importance than safety and comfort.	Travels with three young daughters to school each day, works from home.