‘Lead has become Carbon Dioxide’. Framing sustainable travel in the age of climate change

Abstract

This paper explores the promotion of environmentally sustainable travel and the ways in which individual citizens engage with exhortations to adopt environmentally responsible travel modes. In local contexts, the arguments for promoting modal shifts have focused on issues like congestion, noise reduction and the improvement of local environmental quality. However, in recent years concerns about global climate change have re-framed the promotion of sustainable travel around carbon emissions reductions and more fundamental changes to lifestyle choices as a way of combating climate change. Within this context, this paper considers the ways in which individuals frame sustainable travel through using focus group data collected as part of a wider research project on travel behaviour in the UK. The paper will demonstrate that notions of ‘sustainable’ travel are still largely dominated by localised environmental concerns that have resonances with the everyday experiences and practices of individuals, with many of the factors underlying established discourses of travel behaviour being focused on pragmatic issues like convenience and cost. In contrast, the issue of climate change presents a number of challenges for policy makers seeking to change behaviour because of the contestations surrounding climate science, political leadership and the perceived role of individual consumers in tackling climate change.

Key words: sustainable travel, climate change, behaviour change.
1. **Introduction**

Amongst the many local environmental concerns in developed nations, the growth in private car transport as the dominant mode of travel for individuals has become one of the most contentious issues in recent years (Knowles *et al.*, 2009), for whilst the motor car brings comfort, convenience and reliability as a mode of travel, it also contributes significantly to increased noise levels, reductions in air quality and road congestion. Since the late 1990’s it has been official UK Government policy to reduce reliance on car usage and to shift travel mode choices away from the car towards other forms of transport, both public and private (DETR, 1999; 2000) and the political imperative to reduce car use has recently gathered pace with the rising concerns over climate change (DEFRA, 2005). As Chapman (2007) has demonstrated, car use accounts for a significant proportion of carbon emissions related to transport and also accounts for a major share of personal carbon emissions for those who own private vehicles. However, despite these political ambitions, car ownership has continued to rise annually (DfT, 2007) and the step-change in travel mode choice that is required to reduce reliance on the private car is still a long way off.

As noted in the Government’s most recent (DEFRA, 2005) Sustainable Development Strategy, the emphasis on generating travel mode shift is being placed largely on individuals, as consumers able to make choices about their use of travel modes. Yet despite many campaigns at the national and local level that have exhorted individuals to change their behaviours, progress has been slow and this begins to raise questions not only about the campaigning strategies for encouraging behavioural change, but also the underlying motivations and barriers for adopting more sustainable travel
modes. Indeed, with the emergence of climate change as a powerfully invoked discourse for promoting behaviour change, questions also emerge concerning the ways in which the (still contentious) issue of climate change and emergent discussions of ‘peak oil’ (Dennis and Urry, 2009) may be harming rather than assisting attempts to encourage the use of sustainable travel modes.

This paper explores these issues through the analysis of qualitative data collected as part of a research project exploring sustainable travel in the South West of England. The paper first examines the notion of environmentally sustainable travel within the context of debates in transport research concerning sustainable mobility. Second, the paper explores the ways in which researchers have examined travel behaviour and the motivations and barriers for modal shift within the wider context of transport and mobilities research. Third, the paper uses these two contexts to examine a series of focus group discussions undertaken as part of the research which explored daily travel behaviours with ten groups of individuals. These are analysed through exploring the factors participants identified as significant in their decisions regarding sustainable travel modes and the ways in which climate change frames these decisions. The paper concludes by identifying the ways in which climate change, as an emergent and powerful policy discourse, is re-framing the ways in which individuals react to calls for them to change their travel behaviours.

2. Environmentally sustainable travel

The term ‘sustainable travel’ has been used in many contexts (Knowles et al., 2009), but the European Conference of Ministers of Transport (ECMT, 2004) has attempted to
provide a workable definition through outlining the major properties of a sustainable transport system, namely one that: (a) allows basic access needs of individuals and societies to be met, (b) is affordable, efficient, offers choice and contributes to a vibrant economy, and (c) limits emissions and wastes, whilst minimizing the use of non-renewable resources, the use of land and the production of excess noise. This definition evidently encompasses social, economic and environmental concerns, although it is without doubt that the major focus of most academic research has been within the environmental realm (EEA, 2007; Geurs and Wee, 2000).

Until relatively recently, concerns related to environmentally sustainable travel have largely been focused around the need to tackle particular local environmental concerns such as air quality, traffic congestion and noise levels (Steg and Gifford, 2008). To this end, the promotion of ‘sustainable travel’ has been centred on the municipal scale and has often focused on infrastructural improvements in public transportation and congestion reduction, local air quality monitoring and traffic calming schemes to enhance overall quality of life (Steg and Gifford, 2008). Indeed, the engagement of individuals for behavioural change has largely been through the process of encouraging modal shift away from the motor car and towards less polluting forms of transport. Accordingly, modal shift has largely been viewed as a necessary step towards reducing the negative environmental consequences of motor traffic alongside improvements in the physical infrastructure to facilitate this goal.

However, the growing public and scientific concerns over human induced climate change has highlighted a motivation for more fundamental changes to the transport system and, more importantly, the ways in which individuals make decisions about both
the necessity of travel and their travel mode choices. The Transport White Paper (DfT, 2007) Towards a Sustainable Transport System drew largely on the work of Lord Stern (2006) and the Eddington Transport Study (2006) to set out a policy agenda centred on the sector’s response to the issue of climate change and argued that despite the apparent contradictions between an ever-increasing desire for mobility amongst citizens and the need to reduce carbon emissions, there were major opportunities to create a sustainable transport system whilst maintaining levels of economic competitiveness. Indeed, the White Paper argued that:

“…whilst people continue to value mobility highly, they have also become much more concerned about the adverse impacts of transport on climate, health and quality of life and about their own travel experience as congestion mounts”. (DfT, 2007, p. 1)

These sentiments represent a wider paradigmatic shift in the transport community, away from what Banister (2008) has termed an ‘engineering’ based approach where the emphasis is on demand-led policies that seek to reduce travel times by changes to physical infrastructure and consequent behavioural shifts, to a situation where ‘sustainable mobility’ is regarded as the preferred approach. Adopting this perspective means placing emphasis on mobility as the key point of analysis and thus raises the profile of social dimensions in transport planning. ‘Sustainable mobility’ therefore implies a focus on accessibility, quality of the travel experience and a shift in emphasis away from speed towards reliability and ‘reasonable’ travel times (Banister, 2008).

A move towards greater focus on the social dimensions of transport is recognised in the White Paper, which states that:
“Barriers which prevent people from making informed decisions must be removed. Greener alternatives must be provided and their use actively encouraged. As well as good public transport and better urban design, there needs to be reliable information, labelling and sharing best practice to help people and businesses make sound decisions and stimulate markets for low carbon and high efficiency goods and services” (DfT, 2007, p. XX).

In this way, the politics of sustainable travel have shifted towards creating a low carbon transport system which is based on promoting behavioural change amongst consumers through encouraging ‘sound’ decision making. Accordingly, both individuals as consumers and the wider issue of climate change have attained much greater levels of importance in framing sustainable travel. A key issue therefore becomes the way in which individuals come to make decisions on travel choices and the contexts in which these occur.

3. **Sustainable travel: behaviour, habit and practice**

Within transport studies, authors such as Anable (2005) have noted that the influences on personal travel decisions are complex and there have been efforts to understand the factors that motivate and prevent more sustainable travel choices from a number of disciplines, including psychology, sociology, geography and economics (Freudendal-Pedersen; 2009). However, a number of themes emerge from this diverse set of literatures that represent key concerns for travel researchers and policy makers.

An initial theme emergent from the literature is how the consumption setting and purpose of travel behaviour is significant for travel mode choice, with researchers such as
Barr et al. (2010), Böhler et al. (2006), Dickenson and Dickenson (2006) and Gössling and Peeters (2007) all emphasising the different factors involved in determining travel choices for holiday and daily travel purposes. Within the setting of daily travel, Hunecke et al. (2007) point to the importance of travel purpose as a key influencing factor, stressing the differences in mode choice between activities such as shopping, taking children to school, travel for work and so on. Indeed, the relationship between journeys with multiple purposes and mode choice is also an important consideration.

Alongside recognising the importance of consumption setting and travel purpose, research has also explored a range of specific influences on environmentally responsible travel behaviour and these can be grouped into two broad categories. The first set of influences can be categorised as ‘situational’ factors and relate to the context of individuals as decision makers. As demonstrated by research from Molin and Timmermans (2003), Prillwitz et al. (2007) and Rose and Marfurt (2007), these factors include personal physical abilities, weather conditions, residential location and access to services, socio-demographic variables, life-course events and life-stage. These influences act not only to constrain travel choice in the immediate term but also partly to determine the ability of individuals to make alternative choices in the future. Indeed, factors such as life-course events (Prillwitz et al., 2007) can present favourable opportunities for practitioners to promote changes in travel behaviour during another major event in a household’s life-course, such as moving house or having children.

Situational characteristics are complemented by a second group of influence on travel behaviour which can broadly be termed ‘psychological’ characteristics. Authors such as Anable (2005), Hunecke et al. (2007) and Steg and Gifford (2005) have stressed
the importance of various psychological factors that influence individual perceptions of different travel modes and relate to expressed travel preferences and attitudes. These include perceived social norms, convenience, comfort, effort, reliability, safety, privacy, speed and efficiency. As Steg and Gifford (2005) note, behavioural changes often rely on trade-offs (that are often deemed unacceptable) between these factors, for example the perceived decrease in comfort and increased effort in shifting from private motor vehicles to public transport. Accordingly, they argue that modal shift away from the car is a specific problem because of its high psychological value in terms of convenience, independence, flexibility, perceived safety, social desirability and privacy.

Accordingly, both situational and psychological factors have a major role to play in shaping motivations and barriers for travel behaviour changes. Interestingly, unlike research focused on other pro-environmental behaviours (such as recycling, energy conservation and water use) the role of wider social and environmental values in shaping travel behaviour is more equivocal (Barr, 2008) and would indicate that travel choices are closely related to factors specific to the behaviours in question rather than wider social or environmental concerns (Hunecke et al., 2007). Such a finding is important given that current transport policy is focused on making behavioural changes on the basis of reducing personal and collective carbon emissions to combat the threat of climate change and therefore raises questions about the ways in which travel practices are framed in an era of climate change.

In a broader context, transport researchers and policy makers have considered the ways in which travel behaviour is related to the everyday routines of individuals and households and is thus ‘habitualised’ (Moller, 2002). In contrast to deliberate decisions,
habits are automatic actions taken under certain conditions, especially within stable contextual frames (Verplanken et al., 1997). Because they reduce necessary mental activity, habits are highly functional for a given individual, but other people do not necessarily benefit (Verplanken and Aarts 1999). Indeed, habits present a major challenge for policy makers attempting to influence behaviours because they tend to reduce the viability of travel alternatives and reinforce the benefits of the chosen means of transport (Verplanken et al. 1997). In this way, they also allow individuals to present a distorted perception of other transport modes, resulting in increasing perceived costs for travel alternatives (Kenyon and Lyons 2003). As would be expected, both of these effects become more significant with an increasing frequency of use for chosen travel modes (Harms 2007).

The focus on habits as a key framing device for travel behaviour within transport studies has stressed the importance of understanding how behaviours are reinforced within particular contexts and thus the emphasis on the habitualisation of behaviours is clearly related to another set of literatures from environmental sociology on notions of mobility and social practice. Within the mobilities literature, authors such as and Freudendal-Pedersen (2009) and Urry (2007) have emphasised the importance of embedding research on travel behaviour and transport studies within a wider social and cultural framework that views mobility as part of the everyday practices of individuals and thus significant in fulfilling the necessities of ‘living and being’ (Giddens, 1991). Indeed, within the broader discipline of environmental sociology, authors such as MacNaghten (2003), Spaargaren (2004; 2006), Shove (2003) and Shove and Warde (2002) have argued for a greater focus on practices as a way of appreciating what are
manifested and politically characterised as significant ‘behaviours’ within particular environmental contexts. Accordingly, Shove (2003, p. 9) argues that:

“What counts is the big, and in some cases, global swing of ordinary, routinized and taken for granted practice. This requires an upending of the social environmental research agenda as conventionally formulated. Only by setting ‘the environment’ aside as the main focus of attention will it be possible to follow and analyse processes underpinning the normalisation of consumption and the escalation of demand”.

Accordingly, researchers in other areas of environmental social science have begun to explore the ways in which ‘environmental’ behaviour, as manifested in particular sets of practices that have resonance for policy making on the environment, are formed through contexts of everyday, normalised consumption. In so doing, researchers have derived new perspectives on issues such as waste management (Gregson, 2006; Gregson and Crewe, 2003; Gregson et al., 2007; Bulkeley and Gregson, 2009), water use (Shove and Warde, 2002), energy (Shove et al., 2007) and wider issues of consumption (Spaargaren, 2003; Southerton et al., 2004).

In the same way, travel behaviour researchers need to appreciate the ways in which ostensibly ‘environmentally sustainable’ travel behaviours are part of the wider context of everyday consumption patterns and thus to question the logic of using the environment as a framing device for encouraging change. This becomes a pressing concern when the challenge of climate change is considered because, unlike the established and localised concerns long associated with the need to reduce (experienced) problems like congestion, the global nature of climate change lacks resonance and
connection to the everyday practices of consumption. Accordingly, the remainder of this paper uses empirical material to explore the ways in which a focus on climate change as a rationale for behaviour change is likely to yield substantial shifts in travel practices, or whether researchers and policy makers need to focus more on the role of consumption and the links between travel behaviours and wider social practices.

4. Sustainable travel behaviour in an age of climate change

The research on which this paper is based aimed to explore the role of climate change in framing individual travel choices and attitudes towards sustainable travel. Within this context, the empirical sections of this paper will examine the ways in which an emphasis on climate change in promoting sustainable travel options to individuals is re-framing the ways in which individuals conceptualize their travel and choice of transport mode. In particular, the paper will seek to explore the ways in which climate change problematises the notion of sustainable travel and may become a barrier for promoting alternative modes of travel through a disconnection between environment and practice. Evidence from recent research on public engagement with climate change (Lorenzoni and Pidgeon, 2006; Lorenzoni et al., 2007; Whitmarsh, 2009; Whitmarsh et al., 2011) has demonstrated the ways in which climate change is still a contested construct within public discourses on the environment and this has been characterised by a series of challenges that climate change presents, not least the contestation of scientific evidence in the popular media; the lack of certainty over impacts and causes; the perceived absence of strong political leadership; and the ways in which the behavioural changes seemingly necessary to tackle global climate change present unrealistic and unpalatable choices.
about consumption reduction (Barr et al., 2011). Accordingly, as Stoll-Kleemann et al.
(2001) demonstrated, such challenges can lead to publics adopting strategies of ‘denial’
as a means of dealing with the potential personal consequences of climate change
mitigation.

Within the context of climate change and its implications for behavioural change,
the research for this paper was undertaken as part of an Economic and Social Research
Council (ESRC) project on Promoting Sustainable Travel and was based on developing
both conceptual and practical understandings of travel behaviours and attitudes through
an incremental process of research using focus group discussions, in-depth interviews and
a large scale survey of 2000 households in and around the city of Exeter in South West
England. Five study sites were selected to represent different residential land-use
environments (Polsloe Ward: city-centre high-density; Pennsylvania Ward: inner-city
medium-density suburb; St. Loyes: low-density suburb on city outskirts; Cullompton
North Ward: commuter estate in a market town; and Crediton St. Lawrence Ward: a rural
centre) and research at all stages of the project was undertaken with individuals from
these sites.

The empirical material used in this paper is based on fifteen focus group
discussions undertaken between July 2008 and September 2009 in which individuals
were asked to discuss their travel behaviour and the basis on which they make decisions
concerning their travel choices. As part of this process, participants discussed a wide
range of self-defined environmental issues related to travel, inducing climate change,
although this was only introduced as a particular issue half way through each meeting to
ensure that participants were able to frame the environmental challenges surrounding

URL: http://mc.manuscriptcentral.com/cloe
travel behaviour without being prompted to do so. Indeed, climate change was introduced to the discussion through exploring the shifts in national policies to reduce carbon emissions. In this way, each group explored the potential means by which citizen behaviour could be changed in the future, focusing on the likely consequences of climate change policies for personal travel behaviour.

Three focus groups were held in each of the five study locations and participants were recruited through door-to-door recruitment in the respective wards. Each group meeting lasted 1.5 hours and was held in an accessible location, such as a community or church hall. All meetings were recorded on a digital Dictaphone, were transcribed and analysed through a process of coding that focused initially on content and then underlying discourses. The following sections discuss the findings from the focus group research through exploring the ways in which participants discussed sustainable travel behaviours and their personal commitments, before exploring the ways in which climate change was perceived within the context of sustainable travel. Each quotation from the focus groups is contextualized by the location of the group, group number and individual (anonymised) name.

5. **Daily travel: environment and practice**

As noted earlier in the paper, there have been attempts by policy makers to promote changes in daily travel behaviour in countries like the UK for the past 30 years or so and in recent years attention has focused on establishing the reasons for variable uptake of measures aimed at modal choice changes. As part of the initial discussions on environmentally sustainable transport, rationales that emerged for making changes to
current travel behaviours were framed around the everyday experiences of focus group participants, who drew on these to describe the reasons for behavioural changes, as this extract from a conversation in a suburb with a high student population demonstrates:

“I was talking about how life has changed so much from when I was a child to what it is here. We can’t go on can we? Having more cars and more…The whole town is chaos…” (Dick, Pennsylvania 1).

“We’ve got 4 [cars]” (Tamsin, Pennsylvania 1).

“You see? You see what I am getting at. Are they normally all used at once?” (Dick, Pennsylvania 1).

“Yeah” (all student participants, Pennsylvania 1)

“Each belong to different…well student houses, we’ve got 4 …6 bed house, 4 or us have a got a car. At home, a family of 5 and 4 of us have got cars” (Jean, Pennsylvania 1)

“It’s been dreadful round Exeter recently, all the road works which is why I bought the scooter, because now I can get from one end of the city to the other in twenty minutes, where it would take me double that with all the road works going on. It’s been dreadful. (Stacey, Pennsylvania 3).

These everyday experiences of the challenges posed by private motor transport, were therefore framed through the implicit lenses of factors such as congestion, noise and air pollution that demonstrates the ways in which localised environmental concerns are expressed in relation to transport. Conversations of this nature formed the basis for a discussion of the factors influencing current travel mode choices and in many instances the description of travel behaviour was preceded by an apparent reference to the
important underlying social norm relating to the benefits of environmentally beneficial transport:

“…well I feel guilty about the pollution of the car but I just have to [use the car]….with the nature of my work, because I am self employed I can work anything between 80 and 60 hours a week and very flexible hours. So you know I might need to pop into [town for] 2 hours, I might need to come back later, I might need to have a passenger, I might need to go onto hospital. It’s just absolutely impossible to do by bus” (Cheryl, Crediton 1)

In this extract, the reference to the (environmental) pollution caused by personal motor transport contextualised the ways in which this participant discussed the challenge posed by the time constraints of her employment. Indeed, time was an issue that formed the basis for numerous discussions of the challenges posed by using public forms of transport, as opposed to the perceived flexibility and speed of the motor car:

“I use the car everyday to go to work. Mainly because if I caught a bus I would have 3 buses to catch to get to work and that is time as well its not just the inconvenience of having to do it – you are up against time first thing in the morning” (Emily, Pennsylvania 1).

“And also knowing that connections will be made; I mean if you have got to change from one bus to another you know what the time it should be there…Again very difficult in the city, because as you all know trying to keep to the timetable within a city depends on the congestion of the traffic” (Thomas, St Loyes 3).
A sense that time was a major concern for changing to (potentially more desirable) public transport modes was matched and often used interchangeably with the notions of price and affordability in which several factors featured, including perceptions of cost, efficiency and the role of the state in adjusting the economic system to promote environmentally sustainable forms of travel:

“...buses are extremely expensive. I mean there are fairly regular but they are ludicrously expensive” (Tim, Crediton 1).

“If you go with two people and you pay for it, for that money you can pay the car parking and the petrol and it’s still cheaper” (Becky, Crediton 1).

“Yes there is no incentive to use public transport at all” (Tim, Crediton 1).

Accordingly, there was a sense that both the temporal and financial conditions within which a public transport infrastructure functioned were major challenges for changing travel mode choices, reflecting both the complex mobility patterns that individuals have developed through their use of private motor transport and also the ways in which this type of mobility (with the capital and eminence costs lying with the owner) is financially compared in the same way to public forms of transport on a fares-only basis. In addition to these pragmatic concerns, participants also discussed the ways in which notions of environmentally responsible travel were framed around the importance of mobility to identity and the symbolic value of private transport:

“I think the way that travel...is portrayed in fiction [and] on television dissuades people from switching from cars; sort of the driver of the BMW is successful and he’s riding a bike and he’s some sort of loser. A nobody walks unless they are going upstairs” (Phil, Polsloe, 3).
Once again, this quotation reveals evidence that there was a tension between the perceived desirability of pro-environmental behaviour change and the ways in which established norms of consumption provide effective barriers to what appears to be a (desired) willingness to change. Yet despite these and other barriers discussed by participants, the assumption that changing consumer behaviour as a way of promoting a sustainable transport system remained largely uncontested. In other words, there was little sense that shifting towards the use of public transport, walking and cycling was ‘wrong’ or that such shifts could indeed have positive benefits to the local quality of the environment by reducing congestion and noise pollution. Indeed, the ‘environment’ did not pose a challenge to received assumptions concerning everyday practice; rather it was considered alongside choices about time, convenience and price. As such, although levels of environmental ‘commitment’ were not high, the environment was an accepted and thus legitimised component of how practices emerged. However, when the discussions moved on to exploring behavioural changes within the context of climate change as a specific environmental issue, both the mood and arguments employed in the focus groups altered. Participants were asked to consider the changes they felt were required to combat the issue of global climate change, as they understood it:

‘Car use 30 years ago - there was an energy crisis – ‘we are all going to run out of oil so don’t use your cars so much’. The only trouble [was] leaded petrol poisoned everyone so they had to limit their travel. Lead has become carbon dioxide. You could understand someone being cynical about the messages that are coming through: it’s as if they just want to tell you ‘don’t use your car’ (Phil, Polsloe, 3).
This extract from a conversation about the role of climate change and transport policy illustrates the ways in which participants viewed the role of climate change as part of an ongoing set of wider policy discourses that were in some way conspiratorial. The notion that “Lead has become carbon dioxide” was used to argue that climate change is simply another environmental issue used almost as a proxy for controlling consumer behaviour rather than a legitimate reason for change in its own right. It is to the issue of climate change and travel that we now turn.

6. Travel behaviour in an age of climate change

In discussing climate change and its relationship with travel mode choice, participants explored a range of issues that highlighted the ways in which climate change is contextualised in understandings of personal mobility. These issues can be grouped into three broad themes that emerged from the discussions: the science and certainty of climate change; the policy and politics of climate-related transport policy; and the contested role of consumers in effecting change.

The first theme, relating to the complexities and scientific uncertainties of climate change information evoked responses that are characteristic of discussions surrounding public engagement with climate change (Lorenzoni et al., Whitmarsh et al., 2011) that focus not only the scientific evidence regarding climate change, but also the ways in which this science is communicated and can be used as the basis for action:

“…you hear so many conflicting suggestions and you know, sort of ideas which don’t add up, somebody else says oh that’s wrong, and you know don’t believe that” (Loveday, St. Loyes 3)
Part of the challenge for behavioural change was therefore seen as clarity over the scientific evidence and also the need for travel and transport to be seen in context. For some, the public discussion of climate change and transport issues highlighted the need for action, whilst others sought to contextualise transport’s role in climate change alongside other forms of production and consumption:

“These figures this week published on carbon emissions which are still rocketing up in this country they are just rocketing up at a slightly slower rate than they ever where before. You just think, well all this stuff, you kind of think well actually maybe some of these drastic scenarios are what we actually have to do to change” (Jonathan, Polsloe 3).

“Well…transport is only one small part of the carbon industry, it’s probably the biggest” (Ruth, Polsloe 3).

Accordingly, both the debate in the popular media concerning climate change and its contribution to climate change presented concerns about the ways in which transport and travel should adapt to reduce carbon emissions. Indeed, there was a sense that change should only occur when there was a higher degree of certainty about the outcomes of climate change in the future:

“But in general I mean I just don’t think people are going to change their transport habits, or any other habits actually. On the basis of what’s happening to the planet, because it doesn’t, it’s not something that’s going to happen immediately, and you know even now the Government says well, if we don’t do anything in 20 – 30 years time, it’s going to be in a really bad state and people I don’t think are
willing to make changes now for what might happen in 30 years time. Which as you say may not happen at all!” (Michael, St. Loyes 3)

The communication of science and its associated uncertainties therefore presented a very different way of framing changes to personal mobility that emphasised the need for clarity over the problems and challenges ahead and a realistic vision of what both the impact of climate change would entail and the degree of change required to mitigate against such changes. In the context of promoting behavioural change, climate change therefore lacks the resonance and experiential links to everyday life that are characteristics of traditional problems associated with the results of personal mobility, such as congestion and localised noise and air pollution.

This disconnection between the ‘problem’ of climate change and the ways in which consumers are encouraged to change their travel behaviour also related to a second theme emergent from the focus groups. As Michael (St. Loyes 3) highlighted, the uncertainties associated with climate change have led to inconsistent policy messages from central government that have created inconsistencies and weaknesses in climate-related transport policy. Michael continued:

“I think it’s totally confused actually, I mean I don’t think the Government has a consistent policy…where on one hand the Government wants more and more cars to be sold, and on the other hand they are saying they want people to use public transport, not cars. I mean I think I sympathise with them a bit because you almost can’t win in some of these arguments, because it is so interrelated. It’s not a simple resolution!” (Michael, St. Loyes 3)
However, participants argued that if climate change were such a potent threat to the UK, a greater sense of urgency and action was required and there was a sense that the current political framework for policy making was not adequate to deal with the likely challenges brought about by climate change. Within the following extract, this was related to the wider issues of trust and accountability in UK politics that has resulted from recent scandals relating to the expenses of MP’s and a broader political apathy within the UK:

“The trouble is…government things are short and quick fix” (Jim, Cullompton 3).

“They don’t look beyond the five year political term do they? That’s the problem…but politically they could be cross party things couldn’t they, that everyone sits down and says well you know, I know it’s an ideal world again, but really long term that’s what they should be doing. They should be saying these things are more important than the political short term who’s going to be in power” (Malcolm, Cullompton 3).

“It’s because people don’t trust politicians anymore…Really comes down to that, don’t have a lot of faith in them, so people are more individual and the more individual you become and the more technology allows you to become more of an individual, so unless you are really bothered about the rest of society” (Jim, Cullompton 3).

This final remark emphasises the ways in which participants argued that the inconsistencies in climate-related transport policy were alienating citizens and creating a gap between central government policy on climate change and the expectations being placed on individuals to make travel mode choices in regard to climate change. In the
absence of both the clear communication of climate change and consistent government policy, the issue could be further isolated from everyday consciousness in decision making.

The disempowering nature of climate change was finally noted through the discussions that some participants held regarding their own role in addressing climate change through behavioural shifts. Whilst with discussions of travel mode change had previously focused on the practicalities of making shifts in behaviour (such as time and cost considerations), when climate change was raised as a potential motivator for change, a discourse of disempowerment emerged that focused on the role of individuals within the scale of climate change problems:

“Part of the problem is that some countries don’t even acknowledge that there is climate change. I don’t think America does, does it?” (Pam, Crediton 3)

“I just look at it and think, okay they are almost certainly going to reduce these things into our country causing huge chaos, huge amounts of expenses for people, when the rest of the world…to be honest there is one particular country [China] that’s an up and coming country that I visited two years ago and it’s got an immense population and they are not even interested in reading the first word of this”. (John, Crediton 3)

The sense that changes in personal mobility, however large, would be negated by the increases in carbon emissions from other nations further reinforced the way in which climate change was viewed as a problem that would be hard to tackle through behavioural change and that appeared to be de-motivating for most individuals within the focus groups. Accordingly, as with the discussions of the science of climate change and
resultant policies, the participants were less willing and confident in discussing changes in personal mobility as a result of climate change as an issue. This was in stark contrast to the implicit assumptions associated with changes in personal travel choices before we had introduced climate change into the discussion group meetings. It would thus seem that climate change, despite its media profile and the recent attention paid to transport-related carbon emissions, does not have the resonance with individuals that underlying and predominantly local environmental issues are able to generate.

7. **Discussion: Climate change, travel behaviour and policy**

The focus groups reported in this paper were deliberately constructed to discuss notions of travel behaviour outside and within contexts of climate change as a way of exploring the responses of participants to ideas of travel mode shift through different framings of the ‘problem’. At the start of each group, participants self-framed behavioural changes around the traditional and well-established notions of moving from personal motor transport to public transport, walking and cycling as a way of reducing congestion and associated noise and air pollution. Such shifts were accepted (in principle) as desirable and discussions of behavioural change, which is clearly complex in its own right, were based around issues such as time, cost and the identity value of different travel modes. By contrast, when climate change was discussed as a rationale for behavioural changes, issues of uncertainty, political integrity and personal effectiveness became significant.

These differences lead to two inter-related conclusions about the intellectual and political framing of environmentally sustainable transport within the context of climate change. First, researchers need to be cautious about the potentially misleading results
derived from framing ‘environment’ as an unproblematic and all-encompassing issue when an issue such as transport is considered. The results reported in this paper demonstrate that there are tacit and established social norms which support the notion of environmentally sustainable travel in the context of daily mobility, reinforced by senses of ‘guilt’ when discussing car use. Yet these social norms seem to apply to the lived experiences of individuals that incorporate the impacts of problems like traffic congestion and which are embedded alongside the normalised social practices of everyday life. Intellectually, therefore, there remain questions regarding the extent to which individuals frame behaviours through over-arching issues such as climate change, or whether, as authors such as Shove (2003; 2010) would argue, travel behaviour is part of a set of mobility practices that are representative of wider consumption settings and thus governed by the structure of everyday life, bound-up with the practices of living and being (Giddens, 1991). To this end, the evidence in this paper would suggest that constructed as habits, travel practices are less determined by environmental considerations, but more by the social and consumption settings in which individuals and households are placed, thus highlighting the importance of relating research on travel behaviour in the context of sustainable development to the burgeoning literatures in sociology on social practices and mobility (Verbeek and Mommaas, 2008). In so doing, researchers need not entirely ‘strip out’ environment as a framing device, as could be implied from authors such as Shove (2003); rather, ‘environment’ needs to be viewed alongside the forms of experience that individuals have in their consumption settings. However, there do remain questions regarding the utility and relevance of using climate change as way of understanding practices of mobility when as an issue it appears to be
both isolated from so much of daily life and contested as a scientific construct. To this extent, the evidence in this paper supports much of the recent research that has suggested major challenges for the public’s engagement with climate change (Lorenzoni et al., 2007; Whitmarch, 2009; Whitmarsh et al., 2011). In so doing, more fruitful research on the ways in which mobility practices may be shifted needs to focus on what drives existing patterns of mobility and the social and structural changes needed to shift these and associated patterns of consumption.

In this sense, a second way of framing the relationship between travel behaviour and climate change would be to argue that climate change is largely irrelevant to debates concerning behavioural changes at the individual level and that reliance should be placed on exploring and understanding the factors that are critical to replicating different forms of personal mobility. From a policy perspective, therefore, the issue of climate change becomes irrelevant because of the lack of resonance such an issue has when attempting to change individual practices. As authors such as Agyeman and Angus (2003), Blake (1999) and Shove (2010) have argued, the notion that information forms the basis for changes in behaviour has largely been discounted in academic research and yet it still pervades campaigns such as the UK Government’s recent Act on CO₂ (DEFRA, 2011) initiative that uses information as the basis for promoting shifts in personal mobility. To this extent, policy makers need to focus on the underlying factors that influence practices of mobility and the ways in which policy promotes or contradicts with exhortations to change behaviour. At one level, there are clearly questions about the ways in which policy promotes a particular version of ‘sustainable mobility’ that still views faster travel and thus ‘distance reduction’ as a primary social and economic objective, despite this
contradiction with intellectual framings of sustainable mobility (Banister, 2008). At another level, policy needs to move beyond notions of behavioural change that are de-contextualised and isolated from the everyday experiences of individuals towards an understanding of practice that is situated within the constraints and opportunities of everyday life.

As the evidence in this paper has shown, the promotion of sustainable travel is at a cross-roads between discourses of sustainability that are embedded in local understandings of environmental quality and the emergence of an over-arching narrative for behavioural change that utilises climate change as the main motivator for change. Yet in using climate change in this way, those seeking to change behaviours must confront the contestations and uncertainties surrounding the science and politics of this global issue. Such a strategy has significant risks because it is bound up with the ways in which individuals are able to relate their everyday practices to the apparently abstract and remote issue of climate change. It therefore comes as little surprise that in discussing climate change in relation to everyday practice that individuals make recourse to the ways in which such globalised issues are likely to be transient in nature, linked to the playing out of politics. In this sense, as Phil (Polsloe 3) argued, the debates over reducing car use to combat carbon emissions are simply the playing out of another (temporary) global crisis, of which the Genesis in modern times was the 1970’s energy crisis, followed by concerns over the damage caused by lead in petrol during the 1980’s. In this way: “Lead has [thus] become carbon dioxide”, but there is little evidence that climate change has any more resonance than the latest in a succession of external and distant problems.
References


URL: http://mc.manuscriptcentral.com/cloe
Information and its Potential Contribution to Modal Change. Transportation Research
Part F, 6, 1–21.

Knowles, R., Shaw, J. and Doherty, I, 2009. Transport Geography: mobilities flows and

Lorenzoni, I. and Pidgeon, N, 2006) Public views on climate change: European and USA

engaging with climate change among the UK and their policy implications. Global
Environmental Change 17, 445-459.

Macnaughten, P, 2003) Embodying the environment in everyday life practices. The
Sociological Review 51, 63–84.

McKenzie-Mohr, D, 2000. New Ways to Promote Proenvironmental Behaviour:
Promoting Sustainable Behaviour: An Introduction to Community-Based Social

Choice Decisions: Accumulated Evidence From the Benelux. Proceedings of the 82nd

Working Paper 02-1, Aarhus School of Business.

Organisation for Economic Co-Operation and Development (OECD), 2000. The
Economic and Social Implications of Sustainable Transportation. Proceedings of the

URL: http://mc.manuscriptcentral.com/cloe


URL: http://mc.manuscriptcentral.com/cloe