Sociological perspectives on travel and mobilities: a review

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Abstract

There is increasing interest in understanding and achieving changes in travel behaviour, but a focus on individual behaviour change may overlook the potential for achieving change via transformation at the levels of institutions, cultures and societies - the domains of sociological inquiry. In this paper, we review sociological contributions to the literature on travel and ‘mobilities’. We summarise four key themes which supplement or contradict arguments made in mainstream transport debates on behaviour change. The first involves focusing on travel ‘practices’ as social entities with dynamics of their own, rather than on individual behaviours. The second relates to the changing natures of societies, and the implications for travel. The third explores and interprets the issue of car dependence in ways which highlight the ethical, experiential and emotional dimensions associated with car use, its symbolic role in societies increasingly concerned with consumption, and its differing roles within different cultures. Finally, the ‘new mobilities paradigm’ highlights issues such as the increasing links between travel and new technologies, and the primacy of social networks in influencing travel decisions. These themes emphasise the importance of understanding the broader contexts in which travel choices are made. In particular, the implication is that the creation of more sustainable travel patterns will require changes at a range of social levels, not simply in individual behaviours, and that changes to transport will inevitably be linked with, and influenced by, broader changes in the values and practices developed by societies as a whole.

Keywords: travel behaviour; car dependence; emission reductions; mobilities; sociology; transport
1. Introduction

Reducing greenhouse gas emissions is seen as one of the greatest challenges facing the world. Modelling of abatement options has shown that technological developments, whilst essential, will not be enough on their own to enable sufficient reductions in cumulative CO₂ emissions from the road transport sector (Skippon et al., 2012b). Changes to travel behaviour, which potentially can be achieved sooner, will be essential too.

Interventions aimed at achieving behaviour change in the transport sector have often aimed to encourage changes in the behaviours and choices of individuals (via the types of initiatives discussed in, for example, Cairns et al., 2008 and Graham-Rowe et al., 2011). However, this focus risks missing the opportunity for achieving greater levels of transformation via change at the levels of institutions and societies – an issue articulated during the UK House of Lords inquiry into behaviour change (House of Lords Science and Technology Committee, 2011).

In particular, in the climate change debate, sociologists have been critical of the way in which policy makers have aimed to alter behaviour. For example, Webb (2012) argues: “The framing of the problem as one of behavioural adjustments to individual self-interest obscures alternative understandings of society as a collective accomplishment” (p.109). Meanwhile, Shove (2010) comments on “what seems to be a yawning gulf between the potential contribution of the social sciences and the typically restricted models and concepts of social change embedded in contemporary environmental policy” (p. 1273).

In this paper, we attempt to bridge this apparent gulf through a narrative review of the sociological literature on travel and mobilities where it appears most directly relevant to transport policy and practice. Some key themes and ideas are identified, and we have included a commentary that discusses our perceptions of how they supplement or contradict those currently embodied in models of travel behaviour change derived from disciplines such as psychology and economics. We have approached the review as transport researchers who have an interest in exploring how sociological research can contribute to, challenge and change our understanding of travel and mobility, the formulation of transport policy and its practical implementation; though we are not, ourselves, sociologists.

This review focuses on four broad themes from the sociological literature. The first is a focus on travel ‘practices’ as the units of analysis, rather than on individual behaviours. The second argues that the fundamental nature of societies and social identities are changing in various ways that impact on people’s travel and consequently on transport policy. For example, the self-creation of identity has become increasingly important, with more focus on the role of consumption (including travel) as a means of identity creation. Changes in family structures and living arrangements also have important implications. In the third theme, sociologists have explored and interpreted the issue of car dependence in a number of different ways, highlighting the multiple ethical, experiential and emotional dimensions associated with car use; its symbolic roles in a society increasingly concerned with consumption; and its different roles within different cultures. Finally, the ‘new mobilities paradigm’ highlights issues such as the increasing links between travel and new technologies, and the primacy of social networks in determining travel decisions.

Overall, perhaps the key message for future transport policy is that encouraging more sustainable travel will require changes to the context in which individual decisions are made (or practices are performed), which will inevitably be a complex and multi-stranded endeavour.
2. Scope and methodology

The validity of attempting to explore how far sociological insights can inform other perspectives on transport is, itself, a matter of controversy. For some, it seems obvious: “Of course, different disciplines have different strengths and weaknesses, which is precisely why we need interdisciplinary approaches to address important societal and environmental problems” (Whitmarsh et al., p. 258). However, for others, it is problematic: “contrasting paradigms are incommensurable on a number of counts. They generate different methods of enquiry, different meanings of evidence, and different sorts of research agendas” (Shove, 2011, p. 262).

In this paper, we have not attempted to develop a coherent theoretical position that integrates sociological, psychological and economic concepts. However, we assume that the policy goal of interest – namely, changing travel behaviour or travel practices in ways which will reduce their contributions to climate change – is one which is valid for all disciplines.

A further essential caveat is that, as a narrative review, this paper is not intended to provide a comprehensive, systematic survey of the relevant sociological literature, nor a complete summary of its main insights, nor to presuppose a full and complete knowledge of either sociological or other work on the social dimensions of transport and mobilities. It would be unrealistic, indeed a matter of hubris, to presume that this might be possible, not least since these bodies of knowledge are not defined objectively. Deciding what is relevant to transport policy and practice and what is not, and what counts as sociology and what does not, are, in themselves, topics for endless debate. Rather, we have sought to provide a broad overview of those sociological perspectives that may be of particular interest to the transport community, outline key relevant sociological concepts, and comment on how these add to, or contrast with, mainstream approaches to transport. To an extent, we have also tried to draw on sociological reporting conventions, using quotes from key authors to substantiate arguments, given that sociology is primarily a subject of ideas, analysis and commentary.

A third, important caveat is that we have restricted our scope to themes that appear directly relevant to transport policy and practice in developed countries with high carbon lifestyles, correlated with high levels of material consumption, car ownership and use, and technological development. In contrast, in developing countries, sustainability issues are less to do with giving up high-carbon lifestyles, and more with ensuring that lifestyles develop along different, low-carbon pathways as economies grow; and where, instead of reducing car dependence, the issue is about meeting aspirations in alternative ways that limit the development of car dependence in the first place. In addition, the sociological literature on mobilities contains considerable material on migration and transnational flows, although these topics were also outside our scope.

Our scope has also partly been defined by methodology: this work is based on systematic searches of English language journals (including the journal ‘Mobilities’) and Google Scholar, using combinations of the terms sociology, sociological, sociologist, travel, transport and mobility, with scrutiny of more than 1,500 abstracts to identify relevant work. Moreover, it is well-known that there are some fundamental divides within mainstream transport research, over issues such as the value of time, the rationality of transport choices, or the usefulness of transport modelling, and that sociological research provides certain types of insights on such issues. Pragmatically, while we have concentrated more on work by sociologists, we have included contributions from authors from other disciplines, such as social anthropology, where relevant. As this is a narrative review, we do not give long lists of relevant papers for each point, but simply cite key work that illustrates it, while recognising that there are very many other important contributions that could have been included.
3. Social practices as the unit of analysis

The psychological and micro-economic transport literatures often focus on the behaviours or choices of individuals as their units of analysis. In contrast, the units of analysis in the sociological literature are often ‘social practices’. Social practice theorists see practices as the central social phenomena by reference to which other social entities, such as actions, institutions and structures, are to be understood (Bourdieu, 1977, 1990; Giddens, 1984; Reckwitz 2002; Schatzki, 1996, 2002; Shove, 2010; Warde, 2005). A review of practice theories is beyond the scope of this paper, so our focus here is restricted to clarifying the distinction between ‘practice’ and ‘behaviour’ as we understand it.

Reckwitz (2002, p249-250), in a review of social practice theory, offers the following definition of a practice: “a routinized type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. A practice – a way of cooking, of consuming, of working, of investigating, of taking care of oneself or of others, etc. – forms so to speak a ‘block’ whose existence necessarily depends on the existence and specific inter-connectedness of these elements, and which cannot be reduced to any one of these single elements”. Shove, Pantzar & Watson (2012) offer a simpler picture of the constituent elements of practices, as three broad, interconnected categories: materials, competences and meanings. The practice of driving, for instance, involves materials (roads, cars, petrol stations, etc.), competences (e.g. the competence to drive, the ability to repair and maintain cars); and meanings (e.g. driving as a means of independence, or as a way of signalling masculinity), (Redshaw, 2008). The conjunction of these elements makes up the practice-as-entity (Schatzki, 1996; 2002), which can be discussed and analysed, and which has a career or trajectory of its own. At the same time, practices exist as performances, namely recurrent individual enactments. It is through multiple instances of practice-as-performance that a practice-as-entity is reproduced, maintained and, over time, changed.

The ‘careers’ or ‘trajectories’ of practices are seen as emerging from the formation and dissolution of linkages between elements. The career of the practice of driving a car, for instance, has moved through several phases: not existing as such prior to the nineteenth century, becoming widespread in the developed world in the twentieth, and spreading further into the developing world in the twenty-first. During this period its elements – cars, infrastructure, the skills required to drive, how driving is understood – have all evolved continuously, and in different ways in different cultures around the world. Several of these elements, including, for example, basic ‘rules of the road’, were already in existence, as elements of the prior practice of horse-drawn carriage travel. The new practice of driving was born when the new material element of carriages self-powered by internal combustion engines became linked with these. Thus the practice-as-entity of driving is seen by some sociologists as an entirely different type of construct to driving seen as an individual behaviour, and one in which individuals play a very different role.

Sociologists vary in the extent to which they envisage that human agency influences and shapes social practices. For example, Giddens’ theory of structuration takes the basic domain of the social sciences to be “neither the experiences of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time” (Giddens, 1984, p189). In this view, human agency and social structure are in a relationship with one another, in which each continuously reconstitutes the other, so that, in order to understand society, both the actions of individuals and the ways societies are structured must be examined. Both are important in constituting the landscape of ‘social practices ordered across space and time’. In contrast, Shove (2010) argues that “people ...occupy secondary roles as the carriers of practice” (p. 1279).
However, to date, neither transport policy, nor the mainstream of transport research, has been based on the concept of social practices. Instead, there are a variety of mainstream theories that interpret driving or car use as a behaviour, driven by internal mental processes and/or individual goals and priorities—such as Fuller’s (2011) Risk Allostasis Theory and Summala’s (2007) Multiple Comfort Zone Model of driving behaviour; the Theory of Planned Behaviour (Ajzen, 1991); and Rational Choice Theory (Becker, 1976; Blume & Easley, 2008; Friedman, 1966), particularly as applied to discrete choice studies (e.g. Brownstone, Brunch, & Train, 2000; Dagsvik et al., 2002).

Perhaps the nearest concept to that of social practice within mainstream transport research is that of habit, a form of routinized behaviour that occurs in stable decision making contexts. Mode choice, for instance, can be considered as habitual (Verplanken, Aarts, van Knippenberg and van Knippenberg, 1994). However, habit is also often conceptualised in terms of mental processes (Aarts & Dijksterhuis, 2000), rather than the performance of culturally available practices.

From the perspective of social practice theory, most ‘mainstream’ transport research and policy is focussed on materials (e.g. vehicles) or competences (e.g. driver education). Meanings, on the other hand, have received less attention—as discussed further in section 5.2. There is considerable debate about whether the concepts of behaviour and practice can (or should) be reconciled or integrated. We note the differing perspectives of Whitmarsh et al. (2011) and Shove (2011); and Wilson and Chatterton’s attempt at pragmatic integration which regards both ‘behaviour’ and ‘performance-as-practice’ as equivalent to ‘observable action’ (Wilson & Chatterton, 2011).

Meanwhile, perhaps the most important implication is that a focus on practices, rather than individual behaviours, potentially implies a different orientation for transport policies and interventions. This alternative orientation would consider the roles that policy-makers might play in influencing “the distribution and circulation of materials, competences and meanings” and “in configuring relations between practices; in shaping the careers of practices and those who carry them, and in forging and breaking some of the links, relationships, networks and partnerships involved” (Shove et al., 2012, p163).

One potential difficulty with this approach is that, compared with behaviour-based interventions, it is harder to define interventions, and to assess effectiveness. While behaviour can, in principle, be changed (and assessed) individually, altering social practices must necessarily require change at the level where the practice is shared, which may be a national or even super-national culture. Hence, a key challenge to those advocating a shift in policy orientation is both to articulate the nature of the interventions that can achieve such change, and to provide a body of direct evidence of the efficacy of such interventions.

4. The changing natures of societies

A second theme that emerges from the sociological literature is that transport policy and practice can only be understood in combination with an understanding of the ways in which the underlying natures of societies are changing. This can be illustrated with two examples.

4.1. Changes to family structures and living arrangements

The first relates to changes in family structures. Williams, writing in 2004, highlights that, in the preceding 30 years, a number of processes were occurring, including increased cohabitation, separation, divorce, lone parenthood, more step families, people living on their own, and greater acknowledgement of same sex relationships. She highlights that “two main interpretations of family change dominate public and academic debates. On the one side, the pessimists see changes in family
life as bringing moral decline, a lack of social stability and solidarity, a parenting deficit and selfish individualism. On the other, the optimists identify a process of individualisation whereby people are relieved of fixed conventions and constraints and can begin to shape their lives and relationships” (p24). Williams argues that this growth in ‘individualism’ requires more nuanced interpretation (and is not associated with an overall decline in personal responsibility).

A clear implication is that public policy needs to recognise and effectively engage with “a greater diversity of living arrangements and family forms” (p. 11). In transport policy, this may have wide implications: from family travel offers (often aimed at traditionally-defined ‘2 parents and 2 children’ families), through to information provision and the balance of different types of journeys that are made. For example, those attempting to reduce the use of the car for the school run may increasingly need to interface with a wider range of carers, including grandparents and childminders, via a range of means. As part of these contextual changes, Wellman 2001, as quoted in Elliott and Urry (2010), highlights that societies in the rich north have generally transformed from being ‘door-to-door’ (where contacts are through the locality), to ‘place-to-place’ (where the household is the unit of communication) to ‘person-to-person’ communities (where the person “has become the portal” for information).

It is, perhaps, possible to overstate the importance of these changes. For many children, at least one biological parent is often still taking primary responsibility for the way their lives are organised, and the success of some personalised travel planning initiatives (which involve the provision of locally-specific information to households via doorstep communication) suggests that locality is still important for many people. However, it is necessary to recognise that these wider social changes are occurring, and changing the context in which travel behaviours and practices take place.

4.2. **The self-creation of identity**

A second example is the way in which the self-creation of identity has become a defining feature of the current age (at least in consumer societies). Giddens (1991) argues that “modernity, it might be said, breaks down the protective framework of the small community and of tradition, replacing these with much larger, impersonal organisations. The individual feels bereft and alone in a world in which she or he lacks the psychological supports and the sense of security provided by more traditional settings” (p. 33-34). The result, as summarised by Heffner et al. (2006), is that “Modern culture tells us we can, indeed must, be whoever we want to be. We are required to define and construct our identities...” (p. 31-32). Partly as a result of this increased need to self-create identities, consumer products have become more important – a concept reflected in the sub-title of Dittrmar’s (1992) book ‘The Social Psychology of Material Possessions: To Have is To Be’. Moreover, as highlighted by Heffner, Turrentine & Kurani (2006) in a review of theories relating to the symbolism of cars, the role that products play in individual identity is complex – with at least two broad types of relationship: ‘products as self-expression’, and ‘products as self-creation’. In the former, the system of meanings is shared among people, in social groups or in a wider cultural sense, and these externally defined cultural meanings are drawn on by the individual to express something about themselves (Vleben, 1899; Sirgy, 1982; Solomon, 1982). In the latter, the individual plays a more active role in constructing the meanings of products she/he uses (Csikszentmihalyi & Rochberg-Halton, 1981; Giddens, 1991; McCracken, 1988).

This strand of thinking forms a key part of the sociological commentary about why the car has achieved such appeal – as discussed in section 5.2. It also suggests a fundamental issue that those seeking to move to a different transport paradigm need to grapple with. On the one hand, it perhaps helps to explain some of the steadily growing appeal of new collective transport options which provide a degree of individual control, short-term ownership and opportunities for novel identities.
(such as car clubs, city bike and car hire schemes, lift sharing etc. (Cairns, 2011; Cairns & Harmer, 2011)). On the other hand, it is argued by some that it indicates the need for a transformative shift in cultural norms and social expectations – a process explored by commentators such as Jackson (2006) and Druckman and Jackson (2009).

5. **Understanding car dependence**

The issue of ‘car dependence’ has been both recognised and somewhat contested in the transport literature (see, for example, Dudleston, Hewitt, Stradling & Anable, 2005; Goodwin et al., 1995; Jeekel, 2013; Litman, 1999; Lucas & Jones, 2009; Lucas & Le Vine, 2009; Lyons et al., 2008; Newman & Kenworthy, 1989; Steer Davies Gleave, 2005; Zhang, 2006).

In particular, there is a strong strand of work focusing on car dependence at the level of the individual. Some authors have treated car dependence simply as synonymous with frequent car use. Others have suggested that ‘dependence’ specifically implies a lack of alternatives, while several authors consider there to be a spectrum of degrees of dependency. Various authors have explored whether it is sensible to think in terms of car dependent individuals, or car dependent trips, and have highlighted the importance of particular trip characteristics (such as journey timing, activity locations and the transport of luggage or shopping), as key determinants of dependence. This debate also highlights that ‘car dependence’ can be considered as both an objective phenomenon (dictated by a lack of alternative transport options), and a subjective phenomenon (where people assume that access to a car is necessary to maintain their quality of life), and that car use has a number of psychological attractions, that augment its practical qualities.

A number of strands of sociological work then extend the discussion of car dependence as conventionally featured in the mainstream transport literature. Particular insights are as follows:

- A unique set of values and meanings has become associated with the car, and other travel modes may need to tap into all of those in order to achieve modal shift.
- The meanings and symbols associated with cars are not purely the result of outwardly projected individual values, but also have an independent social construction.
- The diversity of meanings and values attached to cars is not just the result of individual variability, but also results from temporal and culturally specificity – cars can take on particular meanings at particular times, and/or for particular social groups.
- The car has thrived partly because of the unique nature of the travel experience it provides, and some of the characteristics of that experience – for instance, sounds and the generation of personal space – need to be considered more in the promotion of other, lower-carbon modes.

Each of these topics is now discussed in turn.

5.1. **The emotional and ethical dimensions of car use**

There is a considerable body of transport research literature which focuses on the unique value of having, and travelling, by car rather than other means – highlighting that many of these unique features are not currently embodied in other modes. The transport research literature has long recognised that cost and time are not the only attributes that people consider when choosing how to travel, but that factors such as quality of experience, reliability, etc. are also key determinants. The sociology literature takes this further, by suggesting that cars have become embedded in, and associated with, a set of wider social values. For example, Jensen (1999) discusses the links between car use and concepts of freedom, whilst Sheller (2005) highlights that cars “are deeply embedded in
ways of life, networks of friendship and sociality, and moral commitments to family and care for others” (p. 236) and that “car consumption is never simply about rational economic choices, but is as much about aesthetic, emotional and sensory responses to driving, as well as patterns of kinship, sociability, habitation and work” (p. 222).

Similarly, Maxwell (2001) argues that the “positive social frames of meaning of car use associated with care and love for immediate others, as well as care of others within wider social networks, though fundamental, have been almost completely neglected in academic and policy discussions of car use” (p. 217-8). He identifies “a collective sense of unease about the increasing social and environmental problems associated with car use” (p. 203), but, based on findings from two discussion groups, argues that the way in which people make sense of car use is “deeply intertwined with a desire to reduce anxiety and guilt” (p. 206). Some of these relate to personal psychological coping strategies - “Many participants had found ways in which to delegate responsibility for the social and environmental consequences of car use, often to other car users as well as to government” (p. 208). Understanding these strategies, however, does not adequately explain how people make decisions about car use—it is essential to recognise that “there are plural ethics associated with car use in everyday life, and intense negotiations between these ethical stances” (p. 212), such that social and environmental concerns inevitably interact with positive meanings of car use. He argues that more explicit discussion of these meanings would assist transport policy making. Another implication is that promoters of other forms of transport need to find ways of fulfilling the emotional and ethical needs that the car currently achieves.

5.2. The symbolic and cultural significance of the car

It has long been recognised that cars have symbolic meanings and values. However, sociological commentary has helped to broaden the discussion about those symbolisms, and deepen our understanding of the different types of symbolisms involved.

First, there is a considerable body of writing about the car as a cultural object, independent from individual perceptions and experiences of cars. For example, Wollen and Kerr’s (2002) book ‘Autopia’ is dedicated to examining the car “as a hugely important determinant of twentieth-century culture, neither wholly good nor an unmitigated disaster, but certainly endlessly fascinating” (inside cover), with chapters covering its incorporation into art, film, television, literature, advertising, music, and more general culture, both directly and indirectly. Other commentators have also written about particular aspects of the car. For example, Dant (2005) discusses the “assemblage of the driver-car as a form of social being” (p. 61), arguing that this “unit” has become “a feature of the flow of daily social life” (p. 75), with the unique partnership created by the technology of the car and the skills required of the driver becoming an embedded part of modern culture.

Second, there is a wide literature which focuses more specifically on the symbols and symbolism associated with cars, and an argument that such symbolism has increased in cultural importance. In relation to self-expression, products can have two types of symbolic function (Solomon, 1982). They can shape the individual’s portrayal of her/himself and help to define a new social role (and the associated aspect of the self-concept). For example, having a car can help young people portray and define themselves as adults. Alternatively, products can serve as tools in the performance and validation of an existing social role: i.e. they are used (at least in part) to symbolize the role. Thus, for instance, having a multi-purpose vehicle (MPV) can act as a symbol of the role of parent. The meaning of a product can thus undergo a transition from product as stimulus when a social role is new, to product as response when the role is familiar.
Products can also be interpreted as serving as a link between ideals and reality, and as a surrogate for ideals. They may even be bought to try to shape the wider culture. By way of example, Heffner et al. (2006) quote the case of someone buying an electric car, who may do so:

- As a symbol of an existing social role as an environmentalist (product as self-expression/response).
- With little prior interest in environmental issues, but becoming more interested in environmental issues as a result of the way people then respond to them having the electric car (product as stimulus for development of a new social role).
- As part of a project to create an idiosyncratic personal identity (product as identity creation).
- In order to help move towards a better future (link between ideal and reality).
- In order to help support the market for electric cars and encourage further take-up by others (shaping of wider culture).

Heffner et al. (2006) argue that understanding symbolism is key since “symbols are powerful because they are at the root of how we interpret the world around us. Symbols form the basis for communicating culture...” (p. 3). Moreover, they conclude that “products like automobiles symbolise more than just social status, stereotypes or social roles: they can signify any aspect of identity” (p. 31-32).

In brief, then, a key insight is that the cultural significance of cars should not be underestimated, and that purchase or use of any form of transport is potentially linked with some of the processes of identity creation and expression described above. This theme is picked up by Jackson (2006) in his discussion of what would be needed to move towards more sustainable consumption, where he proposes “devising some other, more successful and less ecologically damaging strategy for creating personal and cultural meaning” (p. 20).

Transport research has not widely reflected this. For example, Choo and Mokhtarian (2002) analysed 11 vehicle choice models, and found that the focus in all of them was on monetary costs and functional attributes, although there is some relevant research – for example, exploring symbolic motivations in individual choices about car use (Steg, 2005) or adoption of electric vehicles (Schuitema et al., 2013); symbolic goals as influences on driving behaviour (Skippon, Diels & Reed, 2012); and symbolic meanings of cars (Dunn & Searle, 2010; Heffner, Kurani & Turrentine, 2007; Skippon & Garwood, 2011). One issue is the difficulty with incorporating a relatively subjective concept into quantitative analysis. Some authors have devised quantitative measures of self-congruity (the correspondence between the symbolic meaning of a product, and the identity of its user) and applied these to cars, showing that people prefer cars with which they are more self-congruent (such as Eriksen, 1996 or Heath & Scott, 1998). However there is subjectivity in the attribution of meanings even in this work, and the methods have not been widely adopted.

5.3. Cars and group norms

Another key theme in sociological literature is that car culture is not homogenous. The recent focus on market segmentation approaches in mainstream transport (e.g. Anable, 2005; Thornton et al., 2011) has helped to emphasise that the relationships that individuals have with cars vary, and there is the possibility of identifying specific groups of individuals with shared attitudes. Sociological commentary enriches that understanding by emphasising that meanings are temporally and culturally specific: they can be defined, and vary, in broader ways, at the levels of time periods or particular cultural or social groups. For example, Gartman (2005) argues “there have been three ages of the automobile in the 20th century, each defined by a unique cultural logic of meaning and identity” (p. 170), which he defines as being subsequent eras of ‘class distinction’, ‘mass individuality’ and ‘subcultural differences’.
Meanwhile, Miller (2001) specifically collects together a range of very different perspectives, highlighting that it is not just different individuals who place different values on the car, but entire social groups (as defined by race, income, gender, age, etc.). For example, Gilroy (2001) points out that African-Americans are 30% of the automotive buying public, even though they are only 12% of the US population, suggesting: “the provocative possibility that their distinctive history of propertylessness and material deprivation has inclined them towards a disproportionate investment in particular forms of property that are publicly visible and the status that corresponds to them” (p. 84). In contrast, O’Dell (2001) describes the 1950s development of the ‘Raggare’ youth culture in Sweden, whereby American cars were used as part of a rebellion against mainstream Swedish norms, becoming, for the Raggare, “an inseparable and central component in the cultural construction of their experience of adventure” (p. 126).

One implication is that any new transport ‘solution’ might need to be geared at a number of different levels – not only to the needs and values of different types of individuals, but to the needs and values of particular cultural groups. Another is that segmentation research may need to reflect diversity of meanings between socio-cultural groups, in addition to its present focus on attitudinal and behavioural clusters.

5.4. Experiences of using cars

Issues relating to the experience of travelling in a car are also discussed in the sociological literature. Some of these relate to broader themes on the value of travel time, which are discussed in section 6.1. Many (such as comfort and convenience) are also a common feature of mainstream transport discussion. However, there are two aspects – sound and personal space – which have received particular consideration in the sociological literature.

Bull (2001; 2005) discusses in depth how sound adds to people’s perceptions of driving as a positive experience. “Many drivers habitually switch on their radio as they enter their automobile, describing the space of the car as becoming energised as soon as the radio or music system is switched on.” (p. 246, 2005). Bull adds that the availability of desirable (and personalisable) sound helps the car to feel more like a ‘home’ (a theme discussed below), that it transforms the tedium of everyday trips, that it can enhance the sense of cars as a private space, that cars actually do provide one of the few truly private spaces in which to sing, listen, etc., and that sound is also used as a way of connecting with others and the wider world, thereby helping to fulfil a “compulsiveness towards social proximity and contact with daily life” (p. 243, 2005). Access to desirable and personalisable sound is perhaps an overlooked feature of transport policy. It is perhaps relevant that some car sharing schemes ask about radio preferences when attempting to match people up; that use of MP3 players etc. has become a widespread feature of public transport use; and that reintroducing live music to the Underground was a popular policy of former London Mayor Ken Livingstone.

The (partially linked) notion of the car as personal space, as ‘time out’ from other pressures, a sanctuary, etc. is also discussed frequently. For example, Dennis and Urry (2009) comment that “The car is a sanctuary, a zone of protection, however slender, between oneself and that dangerous world of other cars, and between the places of departure and arrival” (p. 37). To some extent, public transport may also be seen as a good place to ‘zone out’. For example, Stradling (2011) argues that passenger surveys indicate that bus travel “appears to involve being transported while switched off. It is smooth, tranquil, undisturbed, relaxed...” However, the potential benefits that different transport modes offer, or could offer, in terms of the provision of ‘personal space’ are rarely debated explicitly within mainstream transport discussion.
Merriman (2005) also looks at all the other associated ‘spaces’ that have developed with the car, arguing that they should be considered as places in their own right, with particular and dynamic qualities, using, as an example, “the landscapes of the M1” (p. 161). A similar landscape of associated spaces exists for other forms of transport too. To take railway stations as an example, while there is considerable discussion about the nature of facilities provided, recasting stations as a distinct type of place in their own right would potentially put more emphasis on understanding the architecture, design, overall ambience and emotions that they generate, moving away from the more functional approach which is presently common.

6. The new mobilities paradigm

Sociological approaches, then, help in understanding ‘car dependence’, not just as a process based around individual choice and functional, rationally-evaluated benefits, but more as a culturally and institutionally embedded phenomenon, imbued with wider meanings and values. Intriguingly, meanwhile, there is also a growing strand of sociology – led by the ‘new mobilities paradigm’, which appears to be relatively modal-agnostic.

According to Sheller and Urry (2006), movement itself is becoming an increasing feature of modern society – “all the world seems to be on the move” (p. 207). Moreover, “the increasing mobilisation of the world – accelerating carbon-based movements of people, goods, services, ideas and information – affects the ways in which lives are lived, experienced and understood” (Elliott & Urry, 2010, Preface, p. x). In addition, the means of mobility are becoming more complex – relying on “access to car, road space, fuel, lifts, aircraft, trains, ships, taxis, buses, trams, minibuses, email account, internet, telephone and so on” (Elliott & Urry, 2010, p. 11).

These trends are seen as part of a transition to a new social paradigm. We focus here on the individual personal travel aspects, while appreciating that conceptually, it also includes a much wider range of movements, as described above. Dennis and Urry (2009) state “we believe that many important technical-economic, social and policy changes are sowing the seeds of a new mobility that will develop in this century” (p. 63). and that “a high carbon ‘business as usual’ car system is not likely to still be with us by 2050” (p. 134). Instead, they outline three potential alternative futures – ‘post-oil localism’, ‘regional warlordism’, and ‘digital networks of control’. The third scenario is perhaps of particular interest, as it emphasizes the potential integration of transport with telecommunications in a way “which transforms very many kinds of vehicles away from being separate and autonomous towards the automation of movement” (p. 161) – though Dennis and Urry warn that, in their vision, this would lead to the “integration of databases that will have direct implications for human freedom” (p. 161).

Inevitably, there are counter-arguments to the trends that they identify. For example, Wolf (1996) comments that arguments about increasing mobility can be overplayed: “The workers go to and from work five times a week (previously six), while the students continue to go to and from school and university. The average householder goes shopping three or four times a week. At the weekend, the average citizen makes one or two trips to the countryside or to visit friends or relatives and during the week, may go out again, for instance to the cinema. This is how it was in 1929, in 1950, and it is not essentially different in 1995” (p. 10, in Miller, 2001).

Another critique of the new mobilities paradigm concerns its methodology, since much of the work is conceptually based, rather than empirically derived, as recognised, for example, by D’Andrea, Ciolfi and Grey (2011), and summarised in Jeekel’s observation (2013, p.25) that “Most of the literature is qualitative, with few data, almost literary work. Most articles are very descriptive, some with an excursion into philosophy”.
However, the new mobilities paradigm undoubtedly contains a number of interesting insights. In particular, we focus on the following:

- New technologies have changed the flexibility and value of travel time, with implications for appraisal methods that include a value of time; policy measures focused on journey time reliability; the provision of ‘in-transit’ facilities; and, potentially, the relative appeal of the car compared with other modes.
- Network capital – the extent to which one is connected with other people – is a valuable individual asset, and those who lack such capital have the potential to be disadvantaged.

6.1. New technologies and travel time

A key feature of the new mobilities paradigm is the argument that changes in travel are inextricably linked with changes in technology: “in a mobile world, there are extensive and intricate connections between physical travel and modes of communication and these form new fluidities…” (Urry, 2007, p. 5). The relationship between physical and virtual travel has been a long-term topic of debate in the mainstream transport literature (see, for example, Aguilera, 2008; Cairns, 2010; Denstadli, 2004; Mokhtarian & Salomon, 2002). However the sociological literature adds to this by focussing on several interesting aspects.

The first is that times, and timings, have become more flexible. For example, Urry (2007) argues that the introduction of the railways led to “the permeation of a discourse around the need for time to be saved, organised, monitored, regulated and especially to be timetabled” (p. 99) – and a specific focus on ‘clock time’. Now, he argues, the ability of people to reschedule activities in real time, and whilst on the move, has changed this: “such ‘revisions to clock-time’ enacted through mobile calls, emailing and texting suggest a deeper shift in how people experience time itself in conditions of advanced mobilities. For what the continuous coordination of communications, social networks and the mobile self spells is a transformation from punctual time to negotiated time” (Elliott & Urry, 2010, p. 32). This could have important implications – for example, suggesting that improving journey time reliability will potentially become a less important goal for transport policy makers than in the past.

Coupled with this flexibility, new technologies have also increased the activities that can be undertaken whilst travelling. For example, Lyons et al. (2013) found that rail users in the UK in 2010 made much greater use of mobile devices than they had in 2004, and most considered that they made very worthwhile use of their time on the train. Elliott & Urry (2010, p. 32-33) argue further that “it is not only the substantive time of the journey itself that can be ‘filled’ with productive work or meaningful life pursuits. It is also the ‘edges’ of travel time – waiting in an airport terminal lounge, sitting on a delayed train – that become potentially usable in this way”.

This links to a wider debate about how travel time is valued (see, for example, Urry 2007; Lyons & Urry 2005; Mokhtarian 2005; Ory & Mokhtarian, 2005). It has particular implications for transport appraisal methods that use ‘travel time saved’ as a benefit, since, as Urry (2007) describes: “lying behind these assumptions is the notion that journey time is dead time and that any new technology or infrastructure that reduces journey times should be developed since it minimises such wasted time. The emphasis upon ‘speed at all cost’ means that no consideration is paid to the pleasures and uses of travel time, to what people might productively do while ‘on the move’…” (p. 99).

It also implies that the provision of ‘in-transit’ facilities that facilitate the use of information technologies, may become a key factor in determining the appeal of different modes. It also has potential implications for the relative appeal of the car compared with other modes – there is an argument that license holding amongst younger age groups in developed countries may be falling partly because of the incompatibility of using mobile technologies whilst driving and their growth in
relative importance, though other factors, such as changes to licensing and insurance regimes, may also be important, (Wheeler, 2011; Delbosc & Currie, 2013). Interestingly, the emerging prospect of self-driving, autonomous cars (Mitchell, Boroni-Bird & Burns, 2010; Özgüner, Acarman & Redmill, 2011) would entirely free drivers to use time in the car safely for other activities as rail users can now.

6.2. Network capital

A second key strand of the new mobilities paradigm relates to the idea of ‘network capital’ (Larsen, Axhausen & Urry, 2006). Urry (2007) develops this concept in relation to another concept, accessibility, noting that “there are four aspects of access, the economic, the physical, the organizational and the temporal” (p. 194). He argues that accessibility is more directly addressed via the concept of ‘network capital’, “the capacity to engender and sustain social relations with those people who are not necessarily proximate and which generates emotional, financial and practical benefit” (p. 197). He notes that this is similar to Putnam’s related concept of social capital, which “refers to connections among individuals – social networks and norms of reciprocity and trustworthiness that arise from them” (p. 198). While Putnam sees social capital as being fostered within propinquitous communities, Urry highlights the importance of communities which are not based on proximity. Acevedo (2007) defines network capital specifically as an emerging type of social capital “formed from collaborative practices emerging from e-enabled human networks”. Urry’s concept embraces this electronically enabled networking, while also including capacity to network outside one’s proximate area via physical (Elliott & Urry’s ‘corporeal’) travel.

The concept of network capital is potentially useful in debates on social inclusion, not least in terms of highlighting the different dimensions of mobility (e.g. access to communications as well as physical travel options). Urry (2007) argues that a lack of network capital is socially disadvantageous, and that such negative impacts can be observed in reality. For example, “Hurricane Katrina in New Orleans in 2005 showed the extraordinary distributional consequences of uneven levels of network capital within disasters, with predominantly middle class whites able to flee in advance because of their ownership of cars, contacts and communications” (Urry, 2007, p. 203). Rettie (2008) argues that mobile phones increase the social support afforded by a network, improving access to contacts and promoting the development and maintenance of personal relationships. Interestingly, one of Urry’s examples also highlights the importance of propinquity - he notes that during the 1995 Chicago heat wave “in such areas where people were walking and talking they were much less likely to die from heat” (p. 204).

Levels of participation in more dispersed networks may, in any case, depend on a wide range of factors, including type of job, domestic responsibilities, personal inclination, etc. One potential area for future research might be to explore quantitatively the geographical extent of the contacts maintained by different groups in the population, and how they perceive the importance of locality, direct contacts and physical travel versus e-enabled networking.

7. Implications for transport policy and sustainable mobility

From the perspective of transport policymakers and researchers, sociological contributions can be less accessible than more ‘mainstream’ economic, psychological or geographical studies. Sociological writing is often conceptual in nature, sometimes supported by theory-building qualitative research, but less often tested using experimental or quantitative techniques. Both its conceptual nature and the lack of a clear body of ‘practice-based interventions’, which have been implemented and assessed, pose challenges for those seeking to engage the wider transport community with what sociology can contribute. Nevertheless, the themes emerging from the sociological literature suggest
profound challenges for moving towards more sustainable travel patterns in developed countries – particularly as they relate to car dependence, the positive features and emotions associated with car use, the symbolism and meanings associated with cars, and their role in identity creation and expression. In part, these suggest that those promoting alternatives to the car may need to be more creative in how those options are presented and the features that they offer. In part, this commentary also highlights the potential need for a more fundamental discussion about the role that travel plays, or should play, in people’s lives and values.

The sociological literature also emphasizes that car use is not just a matter of individual choice, but reflects much wider societal and cultural contextual factors, and can be seen as a social practice with a dynamic of its own, which can be considered as being distinct from, but reproduced by, individual performances. Webb (2012) suggests that what she terms ‘technologies of behaviour change’ – interventions aimed at changing individual behaviours, based around economic and social-psychological models of behaviour – have so far been ineffective because they have neglected these wider contextual factors. Shove (2010, p. 1274) takes this further by arguing that focusing on individual behaviour as a way of framing policy, “obscures the extent to which governments sustain unsustainable economic institutions and ways of life”. An example in transport might be aviation, where governmental decisions about airport capacity, and the nature of the tax regime, are likely to have a more significant influence on the volume and nature of air travel than programmes aimed at encouraging individuals to opt for ‘greener’ airlines, or to ‘think before they fly’ (see, for example, Cairns & Newson, 2006).

While Webb and Shove argue for a shift away from a policy approach based on individual choice, Wilson and Chatterton (2011) argue pragmatically that policy makers should adopt a pluralistic approach, embracing alternative perspectives: “the crucial next step is to move from single model approaches to a multiple model approach” (p. 2786). They suggest that this would make it possible to compare and contrast the insights from different disciplines, including an understanding of how behavioural norms are generated, maintained and have the potential to be changed at the institutional and cultural level.

The implications of such alternative orientations for transport policy formulation are that changing people’s travel patterns, particularly those involving car use, will require profound changes in decision making by social and cultural institutions, as well as changes in the context within which individual decisions are made. Moreover, the literature we have reviewed suggests this will need to be part of a broader shift towards more sustainable production and consumption habits, so that people’s sense of personal worth and well-being becomes less strongly coupled to material goods. Jackson (2006) argues that there is a need to re-establish “communities of meaning capable of supporting the essential social, psychological and spiritual functionings that have been handed over ... to the symbolic role of consumer goods,” (p. 389) and to “re-engage - as a culture - in some fundamental debates about human progress, about the basis for human well-being, and about meaning and value in human existence” (p389). This endeavour is as relevant in the transport context as in all other areas of life.

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References


