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Automobility reconfigured? Ironic seductions and mundane freedoms in 16-21 year olds' accounts of car driving and ownership

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ABSTRACT

In the light of the 'peak-car' thesis, this paper explores the driving-related desires and practices of adults aged 16–21 and their parents from the UK. Tropes of freedom and independence were commonly evoked; but were pragmatically framed by concerns of finance, utility and risk. Car ownership was prized only for instrumental reasons, and as one tool in a mixed, collective transport network: it had been decoupled from automobility. Environmental sustainability was notably absent from discussions. It may be too early to herald the end of automobility but, for these participants, its seductions have been rendered ironic, rather than aspirational.

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Introduction

In John Urry's classic configuration (Urry 2004), the global 'system' of automobility is characterised by the domination of car travel as uniquely privileged, with cars as iconic consumer items promising quasi-private mobility, within a self-sustaining regime. The dysfunctions and internal contradictions of this regime, and its wide reaching cultural, industrial and political entanglements, have been extensively documented (Böhm et al. 2006; Freund and Martin 2007). Recent debate has focused on whether these dysfunctions have played out to the extent that automobility is now in retreat: that high income countries have reached what has been variously conceptualised as 'peak car' (Newman and Kenworthy 2011; Goodwin and Van Dender 2013); the 'the fourth era of travel' (Metz 2013); or even 'post-car' (Urry 2004). The 'peak car' thesis primarily reflects empirical observations of the levelling off, and even decline, of car ownership and usage (Newman and Kenworthy 2011; Goodwin and Van Dender 2013; Metz 2013) and in the rate of young people acquiring driving licences (Delbosc and Currie 2013). A number of demographic, political and cultural shifts have coalesced to reverse upward trends in car use. Metz (2013), for instance, cites urbanisation and growing investment in rail and bus in dense residential areas in the context of rising life expectancy, which enable young adults to defer expensive private car ownership as part of an extended adolescence. The proliferation of opportunities for virtual mobility have also been suggested as reducing the need for physical mobility, particularly for 'millennials' (those born in the last decades of the Twentieth Century) (McDonald 2015), who have been the particular focus of many accounts of the reduced importance of cars within 'multi-modal' travel styles (Kuhnimhof et al. 2012).

Beyond these empirical indications of a 'peak car' era are signs of a more fundamental fracturing of the hegemony of automobility; summarised as a move towards 'post-car' regimes as we reach 'tipping points' (Urry 2002; Sheller 2004). In addition to technical developments in vehicle manufacture, such as driverless cars, policy shifts in cities increasingly orientated towards managing congestion and pollution, and the 'de-privatisation' of car travel through, for instance, car-pooling schemes, provide what Urry called 'seeds' of transformed urbanity. The transport policies of many national and city governments now prioritise other transport modes, with wide ranging social goals attached to shifts from car-centred transport systems to public transport and active modes (Handy, Van Wee, and Kroesen 2014; Sheller 2015). On cycling, for instance, in the urban centres of northern Europe new 'velo-mobilities' (Watson 2012) have emerged, entailing not simply a regeneration of interest in cycling, but cultural and political realignments which promise new urban mobility regimes. These offer alternative (Aldred 2010), even morally superior (Green, Steinbach, and Datta 2012), practices of mobility, in which cycling offers a 'purer' autonomy than the car can deliver, and one aligned to the healthy, ecological and efficient desires of the model urban citizen (Letell, Sundgvist, and Elam 2011; Green, Steinbach, and Datta 2012). There has also been a resurgence of interest in public transport, with high income cities worldwide recognising that investment appears to leverage disproportionate drops in car usage (Newman and Kenworthy 2011). The meanings of urban public transport are also changing, with evidence from London, for instance, that pro-public transport policies have fostered a view that buses are for everyone, rather than a stigmatised mode for those unable to afford alternatives, with promising indications for futures in which automobility is no longer the unquestioned route to 'independent' travel (Goodman et al. 2013). As Reese (2016) has noted, official policy discourses even in the USA now contain 'unsettled' narratives of automobility reversed, or radically curtailed, as well as narratives of its survival. Thus, alternative mobilities have gained in legitimacy, and the private car no longer evokes the seductions of autonomous mobility or materialises desires for freedom quite so unproblematically, or uniquely, as it perhaps once did.

There are, then, persuasive claims that both individuals' practices and the systems that deliver mobility around car use are changing. However, there are also notes of caution warranted before heralding any imminent end of automobilty. Given the embedded and entangled networks of social, cultural and material networks within which mobility is enacted, transition is unlikely to flow in any linear way from the logics of reducing urban congestion, or policies designed to foster sustainability (Sheller 2012). On the speculative impact of virtual communication, for instance, Urry (2002) notes that 'the virtual' does not simply replace corporeal travel. There are myriad ways in which we are socially and culturally obliged to be 'co-present', both with other people and in other physical locations: the rise in virtual mobilities is likely to reformulate the meanings of co-presence, stimulating new physical travel rather than rendering journeys obsolete. Further, the continued reproduction of automobility relies not on its (often illusory) benefits to drivers in pragmatic terms, but on the cultural reproduction of those illusions through affective dimensions (Sheller 2004) which shape, for instance, drivers' desires for privacy, security or 'me time'. Emotions therefore have a key role in reproducing mobility practices, with comfort and privacy still privileged qualities of automobility in contrast to its alternatives in many settings (Kent 2015). As Wells and Xenias (2015) argue, even where cars no longer plausibly offer autonomy, they can still provide a highly valued 'personal security pod' or 'cocoon' of private mobility; rather than displacing automobility, recent trends may then merely represent evidence of greater inequalities of access to its seductions.

Such debates have real political implications. Perhaps most urgent are those for the sustainability and equity of transport regimes (Watson 2012; Sheller 2015). Automobility inevitably entangles movement with politics: through the ways in which it requires ever greater reserves of oil, and the geo-politics of ensuring such access; through the ways in which it increases the burden of pollution in car-choked urban mega-cities (Adey 2013). Locally and globally, the dysfunctions of automobilty have tended to bear most heavily on those who gain least from its putative benefits: children, the poor, and those from minority ethnic groups are least likely to drive, yet most likely to suffer road injury, the effects of pollution and exclusion from car-dominated public spaces (Freund and Martin 2001; Clark, Millet, and Marshall

2014; Steinbach et al. 2016). There is, then, a normative dimension to analyses of mobility regimes, with the promise that any erosion of the hegemony of automobility is a good thing for ecology, health and equity. For Watson (2012), reflecting on mobility modes as social practice, a key area of intervention for policies directed at more sustainable systems is to look at 'defection and recruitment to practices': the ways in which cycling, say, can become more normalised as practice, and car driving less. Such an approach entails thinking about the complex system of social and technical structures of mobility, the emotional resonances embodied in decisions about mobility, and the performance of practices.

This paper aims to contribute empirically to our understanding of contemporary enrolment to automobility by exploring the practices and desires of a key group of its potential recruits: those aged 16-21 and their parents. In the UK, a provisional driving licence for learning to drive a car can normally be held from the age of 17, so the years 16–211 are often those of active decision making about whether to pay for driving lessons, insure cars, and perhaps consider new transport modes as driving becomes a legal possibility, and people move between education, training and work locations. We analyse the accounts of 16–21 year olds and parents of similarly aged adults, in the light of the peak car thesis. Do their accounts of driving, being driven and considering purchasing a car suggest enrolment to a continuing hegemonic automobility, exclusion from it, resistance to it, or the emergence of a new regime? To what extent are their desires, practices and normative assumptions aligned with an optimistic reading of a 'post car' age of mobility?

To date, debates around whether the signs of 'peak car' are the beginning of an 'end to automobilty' have been drawn largely from analysis of travel survey trends, and from theoretical analysis of the policies and practices of those in the metropolitan centre. Crucially, Sheller (2015) has argued that research on post-automobility has paid insufficient attention to the ways in which transitions are entangled with issues of mobility justice, such as the racialized ways in which space and transport are distributed and enacted in cities. Over-claiming from the experiences of urban millennials risks masking the ways in which 'velo-mobilities', for example, may further disenfranchise groups already marginalised in transport systems (Green, Steinbach, and Datta 2012; Sheller 2015). What has also been less visible (with a few notable exceptions, such as Carrabine and Longhurst 2002) are the voices of 'millennials' themselves: those currently reaching an age where they can legally learn to drive, and considering whether to learn, buy a car, and use it. As social actors on the cusp of potential recruitment to automobility, their desires and practices are of real importance to unpacking how far automobility is being reproduced. At the point where they (and their parents) are having to explicitly consider the costs and benefits of driving, they are also likely to be reflective on its seductions, both anticipated and experienced. To contribute to a more nuanced understanding of recruitment to automobility regimes, we therefore recruited young adults from outside the metropolitan centres which have been the focus of most studies of 'alternative' mobility regimes, including rural areas of the UK where transport infrastructures remain less supportive of a car-free lifestyle, and car ownership is higher than average (DfT 2015).

Methods

The data come from group interviews held with small (two to five participants) 'natural groups' of 16-21 year olds and (separate) groups of parents of those aged 16-21, facilitated to generate collaborative stories and tacit knowledge around car travel. Interview data, if analysed with care to avoid superficial readings, can be used to explore social practices around mobility (Nettleton and Green 2014), and these particular data have some advantages in this respect. First, the participants in this study were at an age when they may be moving or considering moving between school, university, training, work and parental homes; points at which they are rethinking routine mobility practices, and potentially therefore reflexive about them. Second, we invited natural groups of peers, who knew each other outside the research setting. These can off-set some of the limitations of individual interviews: interaction within the group provides access to how social norms are shared, resisted or negotiated; and there is some access to data on practices, as participants challenge or corroborate each other's stories (Polak and Green 2016). Third, we held discussions in venues local to the participants, and travelling

as researchers to these locations provided additional insights into local socio-technical networks of mobility. A topic guide was used to elucidate stories and interaction on: travel to education, work, training and social activities; experiences of driving, getting lifts and being a passenger; decisions around driving licencing; and buying cars and insurance. Group interviews were held between June and October 2015, were recorded, with permission, and transcribed in full.

Groups were from purposively selected areas outside the large metropolitan centres of the UK to include a range by rurality, transport infrastructure, and area deprivation, with over-recruitment from Northern Ireland.² Selected areas were in the following counties: Londonderry, Antrim, Armagh, Tyrone, Ceredigion, Cardiff, Powys, Gwynedd, Suffolk, Staffordshire and North Yorkshire. Within these areas, we invited individuals and their peers to include a range in terms of gender, religious community (in Northern Ireland), and whether in training, work or education (see Table 1 for an overview of the 16–21 year olds who participated). The intention was not to conduct a comparison of countries within the UK, but rather to ensure that we could incorporate a range from both Northern Ireland and England & Wales, which have different transport policy environments. Recruitment was through community groups and local gatekeepers, with individuals identified asked to invite a small number of friends or colleagues. In total, 70 16-21 year olds participated in 17 groups, and 14 parents participated in four groups. In this paper, data extracts are tagged with: the group number; the country (Wales (Wal), England (Eng) or Northern Ireland (NI)); initials (M[ale], F[emale] or I[nterviewer]) to indicate different speakers; and a note if the group were parents. Other details have been removed to maintain confidentiality in what were often sparsely populated settings. All extracts have also been anonymised, with pseudonyms for all personal and place names except capital cities.

Automobility reconfigured

Taking Cresswell's definition of mobility as the 'fragile entanglement of physical movement, representations, and practices' (Cresswell 2010), we report on how 16–21 year olds and parents talk about driving in terms of how it contributes in a practical sense to mobility; what symbolic meanings are attached to cars and driving; and what practices are enabled, or not enabled, by the mobility regimes they inhabit. Our focus is on the practices of those involved in making decisions about driving and being a passenger, and we consider these different interweaving themes of driving in practice, and what it means, effects and affects in the everyday lives of these potential recruits to automobility. In doing so, we hope to complicate any clear sense of 'auto' mobility and 'the private car', to disrupt the equation

Table 1. Reported age, religious community, ethnicity, gender and area deprivation tercile of postcode of 16–21 year old participants

Age	≤71	32
	18–19	15
	≥20	22
	Not given	1
Religious community	•	
,	No religion	28
	Protestant	12
	Catholic	21
	Other Christian	3
	Sikh	2
	Not given	4
Ethnicity	White British	41
•	White Irish	25
	White other	2
	Asian-Indian	2
Gender	Male	34
	Female	36
Deprivation tercile of residence*	Low	24
•	Mid	22
	High	23
	Not known	1

Notes: "Using Index of Multiple Deprivation (IMD) in England and Wales, and Northern Ireland Multiple Deprivation Measure (NIMDM) in Northern Ireland.



made rhetorically between independence and driving, and to explore how these themes shed light on contemporary theoretical and normative claims about changing mobility regimes.

Driving: a fragile marker of freedom and independence

Across all groups the idea, at least, of driving as a mobility practice that was constitutive of adulthood resonated. Driving skills and licences were desired for the benefits they conferred, or were expected to confer, but also as rites of passage on a normative path from childhood 'dependence'. That this would be a shared cultural assumption was implicit in some discussions. For these parents, for instance, learning to drive is presented as simply a taken for granted 'next step' when children turned 17, such that driving lessons were often provided as a default 17th birthday present:

You come up to leaving school and the next step is you want to drive. I think I probably sent off for her provisional licence. Because it was coming up to her 17th birthday and that she was probably going to want a driving lesson on that day. But she was more than keen, that this was the next step, you leave school, and then learn to drive, so [I] can get myself around and don't have to rely on 'taxi mum'. (Eng, Parents, 20)

The inevitability of both driving and desiring to drive suggested in this account was particularly marked in discussions from more rural areas, and with those planning to leave school for a workplace. Here, learning to drive was situated as both practically and symbolically demarcating a transition from dependence on parents to a future 'independent self', and private cars were presented as unquestionably necessary to the process of becoming adult. Thus (for parents) driving licences provided a useful general addition to a skill set and pragmatically enabled school leavers to access opportunities:

F: One thing is because he's going to do an apprenticeship [...] the travel is going to be really difficult, getting to where his apprenticeship is, again, he has to go into [town], get a bus out from [town] to the village where the apprenticeship is, which is actually only eight, nine miles in that direction, but access to it is very, it's going to take him... an hour and a half. (Wal, Parents, 21)

To an extent, 16–21 year olds in rural areas, and those starting work or apprenticeships, echoed the 'necessity' framing of both holding a driving licence and having access to a car for everyday (adult) life:

- M: A lot of jobs will say you, you need a full, clean driving licence. (Eng, 12)
- M: I mean the nearest cashpoint to, to me is five miles away... I have to travel five miles just to cut my hair and that's where the nearest bank is as well. ... So you know, it's, you would need a car to get everywhere. (Wal, 18)

However, in practice, the framing of learning to drive as a normative, taken for granted inevitability and as a route to adult 'independence' was disrupted in various ways. First, as desire, anticipation of the freedoms of automobility was expressed largely by those under 17: those who were, as yet, excluded from any imagined independence. This group of 16 year olds, for instance, who later claimed to enjoy relatively accessible and frequent local bus and train services, and easy access to lifts from parents, anticipate the greater freedoms and conveniences that automobility will offer as rationale for acquiring its benefits as soon as possible – but it is perhaps a thinly-imagined freedom:

- I: Ok, so at point would you think about starting lessons?
- F1: As soon as I can
- M1: As soon as you turn seventeen
- All: Sixteen, seventeen [all mumbling] [...]
- M1: I want to drive like as soon as possible, basically, so me Mum and Dad don't have to take me, like so say when I want to go out, I won't have to get dropped off
- F1: Well, I need to get to school and back. 'Cause me parents work during school I would have to get the bus, or a taxi or something
- F2: Yeah. It's just easier to drive it. (Eng, 14)

Even for those old enough to drive, the promised freedoms were typically of a rather mundane and instrumental sort: to access jobs, training, everyday necessities. Further, driving also offered only a limited kind of freedom, significantly constrained by the context of responsibilities: specifically, those of earning enough to pay for the car, and of undertaking the potentially anxiety-provoking risk work of keeping others safe. In discussions, young adults' accounts of driving rarely evoked alluring myths



of autonomous travel or the 'freedom of the open road'. Those which did were largely, again, in the context of hypothetical desires, from younger participants who were not yet driving or those unable to because of financial constraint:

- M1: I mean it would, it would actually be nice to have the freedom to go when I please and not just like, you know, right, I have to get this bus like the –
- M2: Yeah, you have like, the times of the bus. (Wal, 18)

When referenced by those already driving, the trope of the 'car as freedom' was typically undercut swiftly by talk about constraints and limitations. This participant, for instance, who does not drive, although his partner does, first describes his incentives to get a full licence as 'fun' and 'freedom', but he swiftly follows up with a caveat on the need to be able to finance this:

- M: Um, I've just always thought, I've considered driving to be fun, like I've, it's just something I enjoy doing, like. Um, I think it's a lot easier than just constantly asking people for a lift to go somewhere or catching a bus or something, like I think it's a lot more free
- F: Yeah.
- M: Like you can do what you want to do and go where you want to go with
- I: Hmm
- M: Pretty much easy if, as long as you can support it, you know what I mean? (Eng, 13)

This couple have already described hybrid mobility practices, which are presented as facilitating their freedom to enjoy leisure and social life, rather than as constraints: walking around town; his catching a bus to get to her house; trains for trips out of town for the weekend. The coda at the end of the exchange above ('as long as ...') suggests pressing pragmatic constraints on any additional 'freedom' a car would offer. Unlike parents, who were reported as urging early licensing as an inevitable next step, the younger participants themselves evoked a rather more workaday calculation about when (or even if) to learn to drive.

A second disruption to the inevitability of acquiring a licence as soon as possible was that many of those who were old enough to hold a driving licence described explicit strategies of resistance to attempts to enrol them into automobility. Parents were not only more likely to frame driving as the unquestioned 'next step', they were also more likely to be seen as espousing this view by the 16–21 year olds. Many of the 16–21 year olds themselves characterised their own stance on driving as apathetic, or even oppositional:

- F: My parents kinda made me do it. I couldn't be bothered but they made me do it. (Wal, 17)
- F: My mum made me.... I don't want to drive. ... I hate driving. I hate lessons. It freaks me out. I hate it, but she says it's the only way I will get around. And she said, um, I'm going to drive in the future, anyway, so I might as well start now, but I see no point [laughs]. (Wal, 16)

If parents were reported as active recruiters, peers were reportedly less persuasive. Peer norms tacitly shaped the extent to which particular groups were likely to express normative desires to drive, as suggested in the agreement between participants in the extract from Group 14 above. And many groups certainly discussed the ways in which gaining a licence, or having access to a car, provided status. However, what was notable about accounts of the symbolic gains of driving was the largely joking tone in which they were related. Social norms which linked adult status with driving did appear in our data (as above) – but when cited explicitly, these appeared as humour, largely in examples recreated for the group as entertainment. A generic desire to achieve the 'badge' of a full licence, or even a car itself, was typically acknowledged as a desire held primarily by others, rather than oneself, and a desire that was mocked:

- M: Where like everyone turned 17 and they could get their licences, have like a badge of honour sort of thing, like, 'oh I've got my provisional', or 'I'm taking my driving test there, I passed', 'oh look at my pink card' sort of thing. (Wal, 18)
- F: You're like, oh, 'I feel a bit grown up'.
- M: Yeah, yeah!
- F: So we're 'we're getting older now' [laughs].
- M: You want to be a bit of a show off, as well.
- F: Yeah [laughs]. (Eng, 13)

A final way in which the car as an unproblematic marker of adult independence or status was undermined was the ambivalence around purchasing cars. The putative symbolic resonances of iconic car manufacturers or brands were largely absent across the data. Few specific desirable margues were mentioned as admired or desired, and anticipations of driving or ownership were rarely linked to the aesthetic, sensory or status-achieving pleasures of owning particular models. New cars were valued only insofar as they might reduce high insurance premiums. The semiotic resonances of particular models were acknowledged on rare occasions: this comment on what the Fiat 500 signified, for instance, was one of the few references to a specific desirable, or appropriate, car.

F: You get like, like on Facebook, I get like people sharing these, like the rich, white girl car is the Fiat, those Fiat 500, I see them all the time. It's always young girls, like their first car, you know, and it's, they're shiny and it's, but it's not, obviously it's not a sports car. (Wal, 16)

But even this account suggests that the seductions of iconic brands were largely seen as operating for 'others', and are here disavowed, with the signifiers of gender, affluence and ethnicity cited solely as backdrop to the speaker's own resistance, in choosing something more individual, in this case a classic model from the 1960s:

I've already got my eye on a car ... it's like a little vintage car, a Farago [...] It's about five grand, so I plan on getting a job [slight laugh]. Saving up, but me and my mum are going to split the difference. (Wal, 16)

This woman's explication of the semiotics of brands indicates that their meanings are still shared, despite few references in our data. However, despite her use of these symbolic resonances to forge sub-cultural identity in contrast to the 'Fiat 500' owners, what is notable in this account is that desire is almost immediately tagged to the inevitability of having to collaborate on its purchase. Learning to drive, or buying a car, in themselves fail as signals of any achievement of adult independence, given the need for parental (or other) financial help. The possibility of running a car is discursively tied not to the imagined freedoms of independent mobility, but to the financial responsibilities this entails: the car materialises (in the account above) inter-dependent relationships, not independence. For those still in full time education, or low paid jobs, achieving financial maturity was often cited as a practical reason for delaying driving: (financial) independence was therefore framed as a precondition of being a driver, rather than its consequence:

- M: It costs £20, £25 to £30 per lesson and then like £100 just for the theory test and then your insurance, even at 19, is over £1000 a year which I just can't do at the moment being in college [...]
- I: Have you thought about when is the right time to start driving yourselves?
- M: When you have a form of income that can support the driving with petrol costs, insurance costs, maintenance costs, actually buying the car, you, you do need to have a steady income to do it. There's no way you can do it on just like a student income. (Wal, 19)
- M: Before I even started lessons I saved up about, 300, 320 [pounds]. It got me my actual theory, which was 25, 30 quid, and a lesson a week was like, 20, and that went on for six months, and for the actual test you're talking 45 before you even enter the car and easily another 60 on top of it. So it's 40 for car rental and 20 for the lesson beforehand, and I had to go through it twice, three times [then] the insurance is the killer. [...] I'm driving a car that's older than me at the minute. [...] Insurance in my own name is 3500, roughly. (NI, 7)

Automobility, then, had steep financial barriers for entry, which disrupted any straightforward linking of driving and independence at a practical level. It also, rhetorically, linked driving with inter-dependencies, responsibilities, and even burdens, thus disrupting any easy equation of driving with freedom. These burdens included securing enough income to cover costs, but also included undertaking 'risk work': the mix of practical skills and aptitudes seen as necessary to protect themselves, their passengers and other road users from the well-recognised (and well cited in these data) risks of road injury. Many, both those imagining themselves as future drivers, and those already driving, referred to a sense of ontological responsibility for others as well as themselves – one that weighed particularly heavily for some:

- F: Like, like if you're driving you, you're like in, in control of people's lives. Like if you crash and somebody dies then it's basically your fault. (Eng, 15)
- F: That's what puts me off driving, I'm just scared of causing something, taking someone's life away or something. It's not for me anyway.



- M: Fear was what kept me from my licence. I turned 17 two years ago now [...] I just recently got my licence around May. In my own opinion, if people, if they're anything like I was at 17, show offs, they should just go for physicals, to be honest, to make sure they have the maturity level for it. (NI, 7)
- F: Yeah, but I'm kind of wary of who I put in my car. Like you have to be careful with some people, are they going to be safe in the car, are they going to do what you say? Like at the end of the day you're, you, you've now got to have responsibility of that person 'cause they're in your car. (Eng, 13)

In short, if parents' accounts suggested the inevitability of recruitment into automobility, those of 16–21 year olds themselves undermined this in several ways: on occasion through explicit resistance to learning to drive, but more typically by ironic undercutting of key tropes of freedom, status and independence.

Connections and cocoons

This focus on pragmatic calculations (the car as tool) in accounting for decisions to drive and perhaps purchase a car, did not mean that driving, and (for some) owning a car were not valued for symbolic as well as practical reasons. Being able to drive and, more importantly, having access to a car, might be problematic markers of adulthood as rite of passage, but they did open up new forms of engagement with the local informal transport economy. Given the widespread framing of car travel as necessary (particularly in rural areas), those without access to a car, including those too young, or financially unable, to drive, often described their own mobility as 'dependent', entailing a discomforting supplicant role in 'stealing', 'cadging' or 'begging' lifts:

- I: Um, and is that how you normally travel around, by walking?
- M: Yeah, I mean, if I need to go anywhere else I just, just take a lift, uh, steal a lift
- F: [indicates agreement]
- M: From someone else. (Eng, 12)
- M: I scrounged a lift off my mum. (NI, 5)
- F: I hate asking for lifts as well, I just feel lousy. (NI, 1)

Those who could drive, and particularly those with access to a car, had a very different relationship to this informal economy of lift-provision. Notably, across all groups, participants described private cars as, to a greater or lesser extent, somewhat communal resources. Some shared cars with parents; many routinely organised lift-sharing; and some talked about combining resources to purchase cars: one woman described pooling money with three sisters to buy a car (Eng, 17). Typically, systems of informal lift provision between friends dominated for social activities, whilst family networks were utilised for what were described as more utilitarian trips. Some car sharing arrangements were more elaborate, particularly in rural Northern Ireland, where participants described often complex logistical arrangements to facilitate all household members' travel needs. For parents, one rationale for encouraging their children to drive as soon as possible was that they could then begin to contribute to this economy, rather than be serviced by it:

- F: And also if [my husband] and I are out partying occasionally they can come and pick us up from the pub. ... They'll do that, they'll pick up their younger brother, they'll go and get each other and stuff. So it's nice. It's extra back up for us. (NI, Parents, 11)
- F: My husband's firm take apprentices on, and they tend to like them to drive. 'Cause they can drive share, so take turns, (Eng, Parents, 20)

Thus, as novice drivers acquired their own licences, they were recruited not just into a regime of automobility, but into new roles in local systems, with their own socio-material networks of cars and drivers. These often extended beyond households, as in this exchange about organising leisure and work travel:

- M: You would share lifts a lot of the time. I would maybe run around and lift a couple of friends and just use the one car. Or if we were all from around the one area or if we were coming to the one place we would maybe meet up in the cars and then go from there to go do something.
- F: Yeah, just take it in turns.
- M: But I actually, I work in Ballycorbin, which is 20 odd mile away from me, and I work a four day week there and there's four people lift share, so I drive once every four weeks. (NI, 4)

Importantly, these networks provide benefits beyond the instrumental. For those in rural areas in particular, the car as a shared space was a much-appreciated liminal place, between the private and the public: a place for socialising within, as well as for accessing social life. If the car offered a 'cocoon' (Wells and Xenias 2015), in the accounts of the 16–21 year olds, it was largely a shared cocoon rather than an autonomous one for the individual driver. The car physically delineated a space that set the occupants apart from the outside world (from the risks of public transport, or the cold night air), but it was rarely described as a desirable pod for the solo traveller. Indeed, cars were spoken of most warmly when they were agents in stories about friends or family. Here, cars figured as providing the right material and sensory preconditions to foster prized interaction, 'quality time' or 'good times', as the physical and temporal bounds of the travelling car created spaces of intimacy for conversation, or heightened intensity for shared experiences:

- F: It's just chill, isn't it? It's just like [slight laugh] I tell my mum everything in the car, so it's just like our time kind of thing. How cringe is that? It's our time! (Eng., 15)
- M: It's just chatting to your friends is good.
- F: The car is a really good place to talk to people, because you don't have to look them in the eye, you don't have to worry about eye contact or what you're thinking. You're both facing forward, you can really get into the heart of matters, I think. I enjoy it, in any case. (NI, 1)
- F1: If I'm going somewhere with my friend and we are going to the same place there is no point taking two cars you may as well just share a lift with them and just take them to their car on the way back. Which is what I do quite a bit with my other friend
- I: And so what's good about riding around with your mates?
- F1: You're with your mates at the end of the day really
- F2: Good company
- F1: Yeah, it's just fun. (Wal, 8)

Sharing even when not necessary was usually therefore the preferred option, with sociability valued above individual privacy. In contrast to the warm emotional tenor of stories of shared trips, there were very few accounts of the pleasures of driving alone, or of the intrinsic appeal of a personal 'pod', with music, speed, direction and ambience all within the control of the driver. This account is one of the rare examples of the evocation of the car as a material and affective cocoon, mobilised as a purely personal space:

F: I think it's relaxing. I absolutely love driving. You put the music on and you sing along. 'Cause no one is around you so you are free to sing. There's a song I know on, that's it, I'm going for it. I love it. Long straight road, music, just time to relax really. (Wal, 17)

However, a little later in the discussion, even she tempers her account of the pleasures of the drive with a comment that suggests that this can only be enjoyed in an instrumental context: driving alone for intrinsic emotive pleasures is neither appealing nor financially accessible:

F: I'd rather not just drive around. Like if I'm bored I'd do something else – like watch TV, watch a film, read a book, go on my guitar, things like that rather than going for a pointless drive just because it costs. That's my reason, it just costs too much. (Wal, 17)

In general, preferences were for cars as shared space. Securing the conditions for intimacy or sociability required work: it was a co-creation of drivers, passengers and the materialities of a car on a road. This was not always achieved: feelings of security could potentially be undermined by risky drivers or inappropriately behaved passengers, for instance. Apart from a few enthusiastically recounted stories of spectacular risk taking or narrowly avoided accidents that were clearly part of the stock of peer groups' common histories, most accounts of the negative consequences of shared space related to the disruptions caused by risky others. Dangerous or uncomfortable drivers, or on occasion passengers, were actors in stories about less pleasurable travelling, told to illustrate the speaker's reluctance to be involved:

- F: I hate being [in] his car.
- M: So do we
- I: Whose car?
- M: Like our friend, Pete, because like literally he'll go at 90mph. It's ridiculous...



- F: I, I find it uncomfortable, I just sit there and panic. (Eng., 15)
- M: There was a fella on my course, and we used to live beside each other so he would offer me lifts all the time. But I don't know what it was about him, he was a really calm person until he got into a car [then] he would seethe at people and it just made me really uncomfortable to be beside him. (NI, 7)

However, even where taking or offering lifts was uncomfortable, it was rare that they could be refused: as in these extracts, the implicit assumption is that there was little choice about accepting lifts. Despite widespread hypothetical assertions that they would refuse lifts with those who had been drinking alcohol, or known to be 'dangerous drivers', no actual stories of lifts refused were recounted by participants in our data. The normative expectation appears to be that poor, or even dangerous, driving, had to be accepted as part of the obligations of peer reciprocity that constructed local mobility systems. Not being able to drive, or not having a car, could therefore put you at risk of not being able to take 'responsibility' for your own safety. Many respondents recalled similar troubling experiences, and their lack of control over their situation, as simply a part of travelling as a passenger. Recruitment into automobility seemingly maintains a powerful pull in this sense, even if it did not necessarily entail recruitment into driving.

Alternative mobilities

Where cars were framed as essential in instrumental terms, and taking part in the informal shared economy of lifts was (to an extent) a social obligation, this was often described as the consequence of a lack of alternatives, as in this account in response to a question of the local incentives to learn to drive:

- F: Um, to be more independent and not always like, cos like the buses and everything, it's always one hour and stuff, and not to have like spend money on taxis, [...] I don't have to rely on my Mum and Dad going out places [...] It's more reliable for me, so if I, 'cause like I catch [names bus company] and they are rubbish. [laughs] They are literally rubbish!
- M: Yeah, a lot of them just don't turn up. (Eng, 13)

This typical description of bus services outside city areas as inefficient and unreliable is, significantly, not one which positions public transport as necessarily 'low status', to be avoided on principle. Indeed, most participants reported utilising hybrid modes of travel, with buses used in town where available, walking for short trips, and taxis after nights out. In contrast to the evocative recollections of shared car journeys, there were, though, few accounts of the pleasures of public transport. These, it seems, provided neither the hedonistic or intimacy possibilities of the shared car. Walking and cycling did evoke some accounts of sensory or emotional pleasure, although rarely in the context of routine mobility. Participants in one group in rural Wales reported walking significant distances (up to two hours one way) to access colleges, social life and other amenities. However, for most, both walking and bus travel were still discussed largely as modes of last resort: something you 'had' to do if you had no access to car travel.

In contrast to the reported seductions of cycling in some English cities (Aldred 2010; Green, Steinbach, and Datta 2012), young adults in Northern Ireland, in particular, were scathing about the attractions of cycling. Cycle commuting was something that happened elsewhere, and associated with a rather foreign aesthetic: 'It's so different in the UK where it's like, "oh, I just cycled into work" (NI, 1). Discussing a public bike hire scheme in Belfast, for instance, one group of participants dismissed this as an option for tourists, rather than a candidate option for locals. Further, as the final comment in this exchange suggests, cycling still constituted a practice that was simply 'unthinkable' (Nettleton and Green 2014) for people like them:

- F: I wouldn't be seen dead on a bike.
- M: It's like £3 for 20 min, swear to God. It's £180 just to register [and] they think you're a tourist and they'd knock you off it and they'd do your pockets. I'm not even joking. [...]
- F: Be seen on a bike? I'm 21 years of age and I'm riding about the town on a wee bike? No! You would never live it down. (NI, 6)

There were, then, few signs of the erosion of automobility from alternatives. However, this did not mean that automobility was necessarily hegemonic, or its seductions unchallenged. In the context of



hybrid mobility practices, where alternatives were available and appropriate, and groups of peers could be relied upon for lifts from time to time, some suggested that cars could be resisted:

- I: OK. And so would you like to learn to drive at some point?
- M: No. I've learnt to live without it now, and not, um, don't need it.
- I: No? You've learnt not to need one?
- M: Yeah. I've structured my life in such a way that I don't actually need to, to use a car to get around. (Eng, 12)

'Being a passenger', either sometimes (in the context of car sharing pools), or always (for those who didn't drive), was possible as a long term strategy for local mobility networks in which car transport was framed as necessary. This suggests that driving is less an inevitable life stage than some framings, such as those of the parents in this study, presuppose. Instead, driving (rather than 'using cars') is more pragmatically related to the contingencies of local networks, which include public transport provision, the social meanings of modes such as walking and cycling, and the availability of cars and drivers in the local informal network. Here, for instance, a group of school leavers discuss whether having a car, and being able to drive, will be important once they've left school. Those planning on local apprenticeships describe having a car as a practical necessity, whereas those planning to go on to university in London or other distant cities consider a car largely superfluous:

- F1: Well it depends on where I go. If it's London, I don't think I'll be able to use [a car]. But if it's Kentbridge or Arnecastle, then yeah
- F2: A couple of my friends don't want to learn to drive just because they think it's too expensive, and they think because once we go to uni we won't need cars anyway, so they don't think it's worth it, because we'll just get the train back, rather than driving to uni. So I think a lot of my friends don't learn to drive. (Eng. 14)

Here, then, is an important recognition that the dominance of a car-centred transport system is not inevitable: there are known other places where one can manage without a car, and some people who can manage without driving.

Conclusion

In this study, the tropes utilised in discussions by parents and 16–21 year olds from the UK in relation to their everyday mobility are familiar from classic work on automobility: that driving is necessary, desirable, and offers an independent, autonomous freedom. If a superficial reading suggests that the key elements of a regime of automobility still hold sway, there were also suggestions here of some significant reconfiguration. In accounts of desires and mobility practices, the tropes of automobility were disrupted in several ways. In terms of instrumental value (the car as a tool), access to a private car was widely framed as a necessity for accessing the fundamentals of not a good life, but a subsistence one: work and training, social life, and everyday services remained, in rural areas particularly, accessible only by private car. Discussion about the prestige of cars as desirable iconic consumer items was strikingly absent, and (unlike the parents), 16-21 year olds did not see it as inevitable that they would drive, or would drive as soon as possible. Largely, cars were simply mundane tools in a local mobility network that included drivers (others as well as oneself), transport alternatives, and insurers, which made it a question of calculation (rather than desire) whether learning to drive was a priority or not.

Wells and Xenias (2015), in their caution about any premature heralding of a 'peak car' age, suggest that technological innovations have reframed the car as a 'cocoon' rather than a means to actualise the 'freedom' of the open road. This was echoed in our data, although significantly the cocoon envisaged by most participants was not a pod for the individual traveller, but a liminal space for enjoying company. Wells and Xenias suggest the reframing of desire around security rather than freedom has rather less optimistic implications for policy agendas of sustainability. Our data suggest perhaps more optimism. If cars are seen not as desirable objects in themselves, but merely elements in a mixed economy of options, this suggests a shift away from automobility as inevitable, and a space to uncouple mobility from private car ownership. As well as evoking a rather mundane sense of freedom, for instance, participants in this study also utilised car use and decisions around how to travel as moments and opportunities for forging and articulating relations with friends and family. The cocoon becomes something that can shift in form and meaning here, narrowed and extended with particular effects and affects. Furthermore, taking and giving lifts were part of a more complex mobility network, but also a social and material economy of expectations around adulthood, inter-dependence and responsibility. Taking a lift, for example, was seen as at once risky, necessary and a social act with particular expectations and acceptances.

Discursively, cars still evoked imaginings of adult independence and freedom, particularly in parents' accounts, suggesting novice driving as one mobility practice that continues to co-construct 'young adulthood' (Barker et al. 2009). However, in participants' more concrete experiential stories and accounts, these signifiers were rendered as fragile, and disrupted. Owning and driving cars did not signal 'independence' in any straightforward way. Rather, they generated reflections on the inter-dependencies of mobility. Driving was positioned as a contribution to inter-dependent shared local transport economies; a practice that entailed considerable collaborative risk work; and as an achievement that often required financial collaboration. Even if the financial burdens precluding recruitment to automobility are rationales, rather than reasons, they do discursively position cars as somewhat constrained symbolic carriers of 'freedom'. Like the 17 and 18 year olds in Carrabine and Longhurst's (2002) study in suburban Manchester, who tempered 'hedonism with realism' in actualising anticipations of auto-mobility, the practices of our participants were deeply enmeshed in social networks. Within these, significantly, the car itself was preferably a shared space, rather than an individual cocoon. This cohort, at a point when they are likely to be reflecting on changing mobility practices, had largely decoupled ownership from automobility, with a suggestion that private cars can be communal resources, and that travel itself is preferably social. Speculatively, this has positive implications for sustainability, if the 'cocoon' is no longer desired as a personal retreat.

However, some caveats are in order. We have included only relatively young adults: it is impossible to say whether their desires reflect specifically millennial orientations, or simply the time-limited preferences of younger adults for sociability with friends over, say, the pleasures of solo travel (see Goodman et al. 2013; for how this preference is also evoked in stories of how bus travel can also generate independent mobility in the context of sociability). For those whose access to other spaces of sociability may be limited by rural location, financial constraints, or age-related exclusions, vehicles themselves can provide a rare opportunity for liminal, tightly bound physical environments that enable heightened emotional intimacy (see, for instance, Fjær, Pedersen, and Sandberg 2016 on Norwegian high school graduates' use of buses for partying). Our participants were also disproportionately drawn from more rural areas, where (possibly) individual 'private' time is already abundant: unlike the Australian commuters in, for instance, Kent's (2015) study, whose privacy had been eroded in domains such as work. Further, we do not have direct comparisons with those from previous ages to make strong claims about change. If economic and other social trends have led to merely delaying licensing within an elongated adolescence, then our data only capture a point before adults are financially able to secure the prized cocoon. However, our focus on practices and decisions about using cars, and how they are co-constituted, does make visible the different elements which might be effecting 'change', but which often get silenced in instrumental and normative accounts of driving. Rather than shaped by social, economic and symbolic considerations, we found a much more dynamic and colourful negotiation of these, highlighting the practical ways in which driving, drivers, passengers and kinds of responsibility are managed within local networks, as well as within global regimes of automobility.

Elements of this local network can be shifted materially by (for instance) better provision of public transport or cycling infrastructure, which potentially disrupt the symbolic meanings of the elements within it. There are signs that this has happened in cities such as London, where car driving has been reported now as not only practically challenging, but somewhat morally dubious: 'the new smoking' (Green, Steinbach, and Datta 2012). In the largely rural, suburban and small city settings of this study, there were no suggestions of similar changes in the moral hierarchies of local transport mode alternatives. Buses, cycling and walking were, if not denigrated, still choices of last resort, evoking little pleasure and few seductions. Perhaps surprisingly, environmental rationales for choosing or not choosing to drive or purchase a car were not cited at all in these discussions. Echoing the findings of Gardner and Abraham (2007) ten years earlier, sustainability did not figure, even when participants were asked explicitly about

the negative aspects of driving or cars. However, if it is too early to herald the end of automobility, there is evidence here of both its reconfiguration and its geosocial patterning. Participants described their neighbourhoods as ones that required access to private cars. They did not, though, describe them as ones in which everyone had to own a car, nor ones in which it was inherently desirable for all journeys to be made by car. Neither did they assume that automobility was inevitable; nor that transport modes of current low status were inherently so. Having a licence and/or buying a car were not, then, simply individual decisions, but social practices rooted in wider sets of social, economic and infrastructural relations. By drawing on discussions from those living outside large urban centres we have demonstrated the need to take into account those wider relations which make up practices of mobility and the weighing up of mobility options. It is this careful weighing and calculation that suggests the car is a tool, but also a social and material form that does things and affects people and relations in rather unexpected ways, such as extending social and emotional boundaries between friends and family.

If there is evidence of a 'peak car' era from trends in car ownership and usage, and of a 'post car' regime from sociological analyses of mobilities in affluent cities, our data support Sheller's claim (2015) that such trends will be geosocially patterned by both structural differences, and by the contingencies of local mobility networks. Structurally, material and practical circumstance shaped decisions and practices around car use such that, for instance, the practices of those going on to apprenticeships and work were very different from those in university, or in areas with better public transport resources. These structural differences intersect with local contingencies. That is, young adults are not just recruited into automobility as a global system, but also into specific local networks, in informal transport economies that hold some practices (e.g. cycling) as currently unthinkable, but others (choosing to not learn to drive) as possible.

We have explored the ways in which dominant discourses of automobility have been reconfigured, but not necessarily abandoned. Participants were still being recruited into a dominant regime of automobility, but this regime had perhaps lost any glamour, or cultural seduction. Cars offered neither a protective cocoon for the individual, nor the promise of autonomy. They no longer evoked the high status of conspicuous consumption. Rather, access to a car (whether as driver or passenger) offered freedoms of a rather mundane sort: to engage in the world of work or sociability. These mundane freedoms were framed in the context of responsibilities: to earn sufficient money to keep a car; to acquire skills to manage the risks of the road. The familiar tropes of hegemonic automobility: independence, freedom and the iconic status of cars as consumer items, recur in our data. However, for the 16–21 year olds in this study, they recur as irony, not desire.

Notes

- Different age categories apply for agricultural vehicles and for those receiving some personal independence
 payments; and there are some differences between Great Britain and Northern Ireland in age at which someone
 can first apply for their provisional car driving licence.
- The study was funded to explore young adults' use of car travel to inform debate around the introduction of Graduated Driver Licensing as part of the Road Traffic (Amendment) Bill passed by the Northern Ireland Assembly in 2016, as well as to shed light on the 'peak car' thesis more generally.

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References

Adey, P. 2013. "Air/Atmospheres of the Megacity." Theory, Culture & Society 30: 291–308.

Aldred, R. 2010. "On the Outside': Constructing Cycling Citizenship." Social & Cultural Geography 11: 35–52.

Barker, J., P. Kraftl, J. Horton, and F. Tucker. 2009. "The Road Less Travelled – New Directions in Children's and Young People's Mobility." *Mobilities* 4 (1): 1–10.

Böhm, S., C. Jones, C. Land, and M. Paterson. 2006. "Introduction: Impossibilities of Automobility." In *Against Automobility*, edited by S. Böhm, C. Jones, C. Land, and M. Paterson. Oxford: Blackwell.

Carrabine, E., and B. Longhurst. 2002. "Consuming the Car: Anticipation, Use and Meaning in Contemporary Youth Culture." *The Sociological Review* 50: 181–196.

Clark, L. P., D. B. Millet, and J. D. Marshall. 2014. "National Patterns in Environmental Injustice and Inequality: Outdoor NO₂
Air Pollution in the United States." PLoS ONE 9: e94431.

Cresswell, T. 2010. "Towards a Politics of Mobility." Environment and Planning D: Society and Space 28: 17–31.

Delbosc, A., and G. Currie. 2013. "Causes of Youth Licensing Decline: A Synthesis of Evidence." *Transport Reviews* 33: 271–290. DfT (Department for Transport). 2015. *National Travel Survey Statistics: Travel by Region and Area Type of Residence. Household Car Ownership by Region and Rural Urban Classification: England since 2002 (NTS9902)*. Accessed March 03, 2016. https://www.gov.uk/government/statistical-data-sets/nts99-travel-by-region-and-area-type-of-residence.

Fjær, E. G., W. Pedersen, and S. Sandberg. 2016. "Party on Wheels: Mobile Party Spaces in the Norwegian High School Graduation Celebration." The British Journal of Sociology 67: 328–347.

Freund, P., and G. T. Martin. 2001. "Moving Bodies: Injury, Dis-ease and the Social Organization of Space." *Critical Public Health* 11: 203–214.

Freund, P., and G. Martin. 2007. "Hyperautomobility, the Social Organization of Space, and Health." Mobilities 2: 37–49.

Gardner, B., and C. Abraham. 2007. "What Drives Car Use? A Grounded Theory Analysis of Commuters' Reasons for Driving." Transportation Research Part F: Traffic Psychology and Behaviour 10: 187–200.

Goodman, A., A. Jones, H. Roberts, R. Steinbach, and J. Green. 2013. "We Can All Just Get on a Bus and Go': Rethinking Independent Mobility in the Context of the Universal Provision of Free Bus Travel to Young Londoners." *Mobilities* 9: 275–293.

Goodwin, P., and K. Van Dender. 2013. "Peak Car' - Themes and Issues." Transport Reviews 33: 243-254.

Green, J., R. Steinbach, and J. Datta. 2012. "The Travelling Citizen: Emergent Discourses of Moral Mobility in a Study of Cycling in London." Sociology 46: 272–289.

Handy, S., B. Van Wee, and M. Kroesen. 2014. "Promoting Cycling for Transport: Research Needs and Challenges." *Transport Reviews* 34: 4–24.

Kent, J. L. 2015. "Still Feeling the Car – The Role of Comfort in Sustaining Private Car Use." Mobilities 10: 726–747.

Kuhnimhof, T., R. Buehler, M. Wirtz, and D. Kalinowska. 2012. "Travel Trends among Young Adults in Germany: Increasing Multimodality and Declining Car Use for Men." *Journal of Transport Geography* 24: 443–450.

Letell, M., G. Sundqvist, and M. Elam. 2011. "Steering through the Neighbourhood: Towards an Advanced Liberal Risk Society?" Environment and Planning A 43: 106–125.

McDonald, N. C. 2015. "Are Millennials Really the 'Go-Nowhere' Generation?" *Journal of the American Planning Association* 81: 90–103.

Metz, D. 2013. "Peak Car and Beyond: The Fourth Era of Travel." Transport Reviews 33: 255-270.

Nettleton, S., and J. Green. 2014. "Thinking about Changing Mobility Practices: How a Social Practice Approach Can Help." Sociology of Health & Illness 36: 239–251.

Newman, P., and J. Kenworthy. 2011. "Peak Car Use: Understanding the Demise of Automobile Dependence." World Transport Policy & Practice 17: 31–42.

Polak, L., and J. Green. 2016. "Using Joint Interviews to Add Analytic Value." *Qualitative Health Research* 26 (12): 1638–1648. Reese, K. G. 2016. "Accelerate, Reverse, or Find the off Ramp? Future Automobility in the Fragmented American Imagination." *Mobilities* 11: 152–170.

Sheller, M. 2004. "Automotive Emotions." Theory, Culture and Society 21: 221-242.



Sheller, M. 2012. "The Emergence of New Cultures of Mobility: Stability, Openings, and Prospects." In *Automobility in Transition? A Socio-technical Analysis of Sustainable Transport*, edited by F. Geels, R. Kemp, G. Dudley, and G. Lyons, 180–202. London.

Sheller, M. 2015. "Racialized Mobility Transitions in Philadelphia: Connecting Urban Sustainability and Transport Justice." *City and Society* 27: 70–91.

Steinbach, R., J. Green, M. G. Kenward, and P. Edwards. 2016. "Is Ethnic Density Associated with Risk of Child Pedestrian Injury? A Comparison of Inter-census Changes in Ethnic Populations and Injury Rates." Ethnicity & Health 21: 1–19.

Urry, J. 2002. "Mobility and Proximity." Sociology 36: 255–274.

Urry, J. 2004. "The 'System' of Automobility." Theory, Culture & Society 21: 25–39.

Watson, M. 2012. "How Theories of Practice Can Inform Transition to a Decarbonised Transport System." *Journal of Transport Geography* 24: 488–496.

Wells, P., and D. Xenias. 2015. "From 'Freedom of the Open Road' to 'Cocooning': Understanding Resistance to Change in Personal Private Automobility." *Environmental Innovation and Societal Transitions* 16: 106–119.