

Drivers and Passengers

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Who is a driver? The question brings to mind the car driver, the person who will get behind the wheel, start the car and 'drive off'. The term also fits easily with those who do something similar with trucks, trains, buses and other vehicles, usually with wheels. Who is a passenger? In our contemporary culture we think of the passenger as a person who gets into the vehicle and is driven away by someone else (the car driver, bus driver or train driver). The driver is an active subject and the passenger a passive one; the driver initiates and steers mobility, the passenger gives themselves up to mobility steered by someone else. These are two contrasting subject positions associated within mobility in the twenty-first century, but their social and material relations are undergoing changes and are even converging. Because embodied mobility (as opposed to virtual mobility) is so often tied up with wheeled vehicles, I will take the driver and passenger in the car as the paradigm case. Most passengers in trains or aeroplanes could not become the driver, but the passenger in a car is also often a driver and the driver sometimes a passenger. In this paper I want to explore the connections between these two positions, and in particular what happens when technology turns the driver into a passenger. No doubt there are other modes of mobility in which there is similar potential for the exchange of role between passenger and driver because both share similar skills and competence (the horse-drawn carriage and the bicycle rickshaw perhaps), but the ubiquity and familiarity of the car makes it the ideal example.

The motoring industry is beginning to adjust to what appears to be a downturn in the popularity of the motorcar as a means of transport.¹ Since 2007 there is some evidence of a decline in the number of cars being registered and the number of people who are passing the driving test.² It may be that the status and convenience of the car is in decline, it may be that the appeal of being in control of a car is fading as roads become more congested, or it may be that the cost of insuring a car is becoming prohibitive, especially for young people. It would be particularly interesting if this decline in enthusiasm for the car and the changing status of becoming a car driver were linked to the academic criticism of this means of transport for modern societies (Whitelegg 1977; Dant and Martin 2001; Sloman 2006; Böhm *et al.* 2006; Conley and Tigar McLaren 2009). It is more likely however that declining car consumption is linked to the economic downturn, which may be in itself a good reason for increasing the critique of the car in modern lives to push car culture beyond its 'tipping point' (Lutz and

Lutz Fernandez 2010).³ Just what a 'car' is in flux, as the technology and practices around the car, its control and the road are changing (Dennis and Urry 2009). The technology of cars and roads has developed, with mechanical, electrical and now digital innovations making the task of driving an 'easier' as well as a more efficient means of mobility, which is much less likely to kill people. Most recently, the responsibilities of the driver have begun to be transferred to digital control systems in the car and the 'intelligent' road – developments which have the potential to turn all drivers into passengers.

Traditional roles

The traditional meaning of the word 'driver' is as much about impulsion as steering; the driver of a horse, mule or elephant impels the beast with whip, spurs or stick to go faster or to keep going when it is tired. In a sailing yacht it is the force of the wind captured through the sails that drives the boat, and a 'driver' is a fore-and-aft sail over the rudder on a square-rigger that provides extra impulsion when turning. In a modern ship, drive comes from behind, through propellers, and the origins of the word 'drive' from German are to do with 'pushing from behind'; this makes sense of the mule driver, the driver sail, as well as the slave driver and the golfer's 'driver', a heavy club that 'pushes' the ball a long way. For psychologists, drives are internal forces pushing in the direction of a person's needs and instincts, and in a computer a 'driver' is a programme that pushes instructions from the central processor to a peripheral device such as a printer or screen. But the human subject of the car driver does anything but push from behind! Ironically the cyclist, who does provide the driving force as well as control the vehicle, is simply a rider and not a driver.

The passenger is altogether less confusing; anyone being conveyed by a means of transport, whether it is a rickshaw or an aeroplane, a car or a ship, is a passenger . . . as long as they are not the driver (or pilot, or captain). The passenger is someone whose mobility is powered from outside themselves and, most importantly, the control and direction of travel is independent of them. The pedestrian and the cyclist cannot be passengers, but the person in an air balloon's gondola or the howdah on an elephant can be. The English word passenger derives from the French '*passager*' (Old French *passageor*), with meanings of 'passing by' as well as 'traveller'. This suggests a more autonomous mobility than the passive role in modern usage, and indeed the root 'pass', also from the Old French, refers to 'step', or 'pace'. Passengers do have a strong interest in where they are going and usually like to face the front, seated and relaxed, much like a driver. An emerging topic of interest for researchers in the transport geography and mobilities fields is the idea of the passenger not simply as a subject 'contained' or 'cocooned' in material ways, but also subject to bureaucracy and government (Bissell *et al.* 2011). This new thinking about the passenger is exploring the changing sociality as well as the emotional and material experience of passengering (see the papers on airline, coach, ferry and illegal passengers in the Special Issue of the *Journal of Transport Geography* (Bissell *et al.* 2011 and Adey *et al.* forthcoming).

In all the mobility possibilities I've mentioned (cars, trains, animals, ships, aeroplanes, bicycles) there is a necessary material interaction, a direct engagement of a human body with another material entity in a series of actions and reactions. These are often routine, habitual practices (getting on the bus and finding a seat, sitting behind the wheel and starting the engine) that are unremarkable until something goes wrong, but they are changing in ways that are altering the roles of the passenger and the driver. These material interactions involve different types of agency, which is what is sociologically interesting about the changing roles. When I get up from my chair, leave the house and walk to the shop to buy a loaf of bread,

I am clearly the agent of my actions. I have formed the wish to buy the bread, chosen the moment to act, and I control my body's movement in space as well as exert the muscular force necessary to get out of the chair and do the walking. I can choose the route (I might go the scenic way), go quickly or slowly, invite a companion, and I can manage the interaction with the shop and sales assistant at the other end of the walk. No other agency need be involved until I get to the shop; I can provide the motivational, intellectual and bodily power that is needed. These are precisely the embodied capacities of agency that are restricted in those suffering from a mobility or mental impairment. When other things – equipment of various sorts – become involved in a trip to get bread (horse and trap, bicycle, motorcar, bus, electric scooter), then the various aspects of agency are distributed throughout an assemblage of mobility components that is put together from what has been accumulated. I want to argue here that there are three dimensions of mobility – assemblage, agency and mobility capital – that are necessary to distinguish between the roles of passenger and driver and to understand how these roles are changing.

Assemblage

Even before the human child can walk it is often equipped with shoes and for most human beings some form of footwear – from flip-flops to waterproof hiking boots – is added to the body to enhance its native capacity as it becomes mobile. The conjunction of different types of components to form an entity that operates as a whole but which can at some point be disassembled, is best thought of as an 'assemblage'.⁴ The human with shoes, then, is a simple 'mobility assemblage' with different capacities; running spikes with flat heels will increase traction for acceleration and turning, whereas spike heels will make running very difficult but will increase height and exaggerate the shape of the torso. The mobile human is almost always part of an assemblage that includes material objects that are gathered together for particular types of mobility. A cyclist is a human being in material interaction with the equipment of a bicycle and the specific capacities that it enables; it may be a folding bike, a mountain bike or a touring bike. The driver-car forms an assemblage that includes at least a driver and a car that can be started and controlled by the driver; it may also include passengers or bags, or other types of equipment included for the journey (Dant 2004).

The connection between the various components of mobility assemblages could be thought of as a 'hybrid' or an 'actor-network', but the drawback of these concepts is the downplaying of the particular capacities that the human component brings to the mobile assemblage. This has two key dimensions: the intentionality that motivates the mobility and the intentionality that directs it. I am using intentionality here in the phenomenological sense of consciousness that is directed towards something (Husserl 1999: 33). It is a human property that points to the range of possibilities that are open and on which consciousness works to direct the human being into the future. Various forms of motor technology have supplemented or replaced the motor capacity of the human body, but digital technology intrudes into human capacity for consciousness and alters, even relocates, the intentionality for mobility elsewhere in the assemblage.

Agency

The possibility of mobility is a mode of intentionality that the driver shares with the passenger but never completely with the equipment of the car or the bicycle. If instead of walking I use my car to get to the bakers, I lose none of the agency of choice or intention but I give

up some of the agency of embodied motility as the car does most of the work. If instead of walking I call a taxi or get a bus, then even more of my agency is given up – not just that of embodied motility but also the fine tuning of timing, route and pace. These different practices of mobility – walking, driving and being a passenger – involve different degrees of agency or control over intentions and movement. I shall call the directing of consciousness to where the mobile subject is to go *intentionality of purpose*, while the directing of consciousness to how mobility will be realised I will call *intentionality of progress*. The driver always has intentionality of progress and the willing passenger always has intentionality of purpose, but both modes of intentionality are present in the person who is their own agent, such as the driver using their car to get bread. But if the driver is the agent of someone else (the taxi-driver, chauffeur, or bus-driver, for example) then they only have intentionality of progress.⁵ Intentionality of purpose fits with the common-sense notion of having an intention in that it is formed in consciousness by some sort of thought process such as making a decision or making a choice after deliberating on consequences or expectations. Intentionality of progress may be a more background process of consciousness involving a habitual exercise of skill such as driving a car. Fully attentive conscious intention is needed to acquire the skill, but once it is embodied it requires varying levels of conscious attention according to the unfolding situation.

Put simply, the intentional agency in the motorcar is within the human driver and together the driver-car forms the assemblage that brings together the various capacities needed to enact that agency through the material interaction that we call ‘driving’ (Dant 2004). The driver’s consciousness is directed towards mobility, to the process of progressing towards the chosen end. Even when intentionality of purpose is formed in the mind of the driver (‘I must get to Preston’) there remain a series of possibilities that conscious intentionality must work on progressively. At an early stage some decisions about route are important – whether to go by the A6 or the M6 – and these may be dealt with through conscious deliberation about traffic, travelling times or short cuts, but may be dealt with by habitual patterns. But then there are possibilities that must be continuously negotiated: the management of speed and braking, choosing the lane on a motorway or at a junction, keeping a safe distance from other vehicles, and looking out for obstructions, especially those that are moving. These are the aspects of consciousness that the passenger is relieved of; their intentional consciousness can be directed to talking on the telephone, reading, daydreaming or looking out of the window at the scenery. Passengers can even doze or sleep. And these are the sorts of things that the driver cannot do since their intentional consciousness is preoccupied with progressing mobility. Some drivers do become skilled at ‘multi-tasking’ and can have complex conversations with passengers or on mobile phones, and even looking at maps or documents while they are driving (Laurier 2004). The driver may co-opt the passenger into the agency of driving as conversation is interspersed with pauses for driverly attention, at a junction for example, or for commentary on other road users (Laurier *et al.* 2008; Laurier and Dant 2012).

The history of automobile technology has evolved towards the driverless car (Dant 2012) in a series of stages through which intentionality of progress is given up to the car itself. The traditional motorcar is a tool of the driver who controls the engine, the steering, the gears and the brakes through his or her motor capacities. These four systems are designed to realise the driver’s intentionality of progress and are ‘equipment’, in the Heideggerian sense, within the assemblage. Equipment is not a ‘mere thing’ like a stone that is found, and neither is it an artwork created by a human; it is in-between because it has the thingness of a mere thing but it has usefulness, that is to say, it is produced by human intentionality, directed towards something. For Heidegger an artwork has the properties of a thing but it has no purpose or

use – it is sufficient in itself – whereas: ‘A being that falls under usefulness is always the product of a process of making. It is made as a piece of equipment for something’ (Heidegger 2001: 28; see also Verbeek 2005: 83–5). The motorcar is a thing but it is made up of things, each of which is ‘equipment’ with usefulness as well as aesthetic qualities (the bodywork, for example, is intended to protect the occupants as well as look good). It is intentionality in the design and making of these things that makes them ‘equipment’ directed towards the use or purpose of enhancing the mobility of the whole assemblage.

The many subsystems within the thing of the car developed initially through redesigned mechanical systems (such as rack and pinion steering, which improved the precision and sense of feedback over the recirculating ball system), and later through servo systems that redirect power from the engine to add force to that applied by the driver (as with power steering). Some equipment, such as an automatic gearbox, removes a whole subsystem from the driver’s material interaction. The agency for deciding on the route may, for example, be handed over to a passenger, to the driver of a taxi or to a ‘satnav’ system. Intentionality of purpose is in the mobile person but they may hand over responsibility for achieving it – the intentionality of progress – to other people or systems. Cruise control, introduced in the 1950s as a mechanical system that maintains a steady speed without the need for constant pressure on the accelerator, began the move towards the car controlling itself. Since becoming an electronic system in the 1970s, cruise control can be linked to sensor-based warning systems and digital management systems. These can be set to take over control when warnings to the driver about being too close to the car in front fail to prompt a response. Sensor-based digital control systems can be very precise – quicker and more accurate than a human driver’s response to the situation – allowing intentionality of progress to be transferred from the driver to the car. Once the satnav guidance system capturing the intentionality of purpose is linked to the control systems responding to the traffic situation, the driver’s agency gives way to a passenger mode of agency in the ‘driverless car’ (Dant 2012).⁶ But the agency of mobility in a digital environment may not be exclusively in the on-board systems in the car. The ‘convoy system’ turns the driver into a passenger at the moment they join the convoy and give up their intentionality of progress to the lead driver controlling the convoy. The ‘intelligent road’, however, offers the possibility of a continuous stream of information both from other nearby vehicles and a road management system that is monitoring the state of the traffic on relevant routes. Even the agency of the passenger to select their route may be restricted once intentionality of progress is managed on a collective rather than an individual basis.

Mobility capital

Mobility capital lies with whoever has the ultimate power to realise intentionality of purpose through the agency of the assemblage (Dant 2004: 76). It is the accumulation of the wherewithal to move people and things and may be in the possession of individuals, households or organisations including companies, local authorities and governments.⁷ It is useful to think of the means of mobility as capitalised since money has to be accumulated and invested to access almost all forms of mobility. Mobility capital is a sub-form of cultural capital, as described by Pierre Bourdieu (1986), that has an embodied state in the driver and passenger, an objectified state as mobility equipment, and an institutionalised state in the legal, bureaucratic and organisational context of mobility. As Bourdieu made clear, the various forms of capital are no more than accumulated labour appropriated by agents or groups of agents, and their control is an expression of power (see Jensen 2011 for an analysis of mobility as power). As Bourdieu puts it: ‘To possess the machines, he only needs economic capital; to appropriate

them and use them in accordance with their specific purpose (defined by the cultural capital, of scientific or technical type, incorporated in them), he must have access to embodied cultural capital, either in person or by proxy' (1986: 50). The businessman who owns a car and employs a chauffeur may be a passenger, but he deploys his mobility capital to bring together an assemblage that gets him where he wishes to go. Bus companies and taxi firms gather equipment and people into sub-assemblages of vehicles and drivers who deploy intentionality of progress on behalf of passengers whose intentionality of purpose is realised in exchange for the fare. Car clubs, on the other hand, accumulate mobility capital in an intermediary corporation that is then deployed by 'drivers' who add their intentionality of progress as well as intentionality of purpose. The complex institutional systems that manage and control mobility – tax, insurance, policing, fuelling and repairing systems, for example – are themselves accumulations of capital in the form of people, buildings, equipment and files.

Mobility capital has three aspects: material equipment, energy and intelligence. Firstly, the material aspect lies in the ownership or control of equipment of all sorts: shoes, wheelchairs, bicycles, prams, as well as cars, helicopters and ships. The mobility capital in material equipment includes its various capacities for speed, comfort, range and volume, but it also includes its readiness and state of repair as well as any subsidiary equipment such as trailers, caravans and racks. The capacity to store mobility equipment when it is not in use (garage, parking space, bicycle shed) is an extension of the capital that also needs to be accumulated. Mobility equipment can be shared (e.g. the school minibus) or owned by a corporation whose employees use it for the corporation's purposes. Collectively accumulated mobility capital such as railtracks, airports and roads, with all their complex equipment (signage, surfaces, controls, buildings), are assemblages without which most vehicles are useless. Secondly, the energy for propulsion must also be acquired and accumulated. Walking and cycling requires the investment and accumulation of food energy and the preparation of motor capacity in key muscles in the human body. The energy for motor vehicles is accumulated in a limited way in the petrol or diesel in the on-board tank, or the electricity in a battery, but is accumulated in a more substantial way by corporations that store fuel in tanks of various sorts. Wind and solar energy can be converted into electricity for storage, and used for driving equipment which moves through water, on land or through the air. But both wind and solar energy can also be used as a directly propulsive force on boats, land vehicles and even aeroplanes without any prior accumulation. Finally, the 'intelligence' necessary for mobility is the capacity to realise intentionality of purpose through controlling and directing progress. Most human beings learn to walk and many human beings develop the capacity to control and direct motor forces beyond their body in riding a bicycle, steering a pram and driving a car. Intelligence and memory are also involved in learning how to find and follow paths and routes, though this capacity may be in a passenger who can be co-opted into the mobility assemblage as a navigator. Mobility intelligence can also be enhanced or even replaced by material capital: maps and satnavs, speedometers and digital control systems. These systems still require programming and interpretation – a residual human contribution that requires little mobility capital.

There are overlaps between the way I have discussed 'mobility capital' and the concepts of 'motility' (Kaufmann 2003; Kaufmann *et al.* 2004), 'network capital' (Urry 2002; Larsen *et al.* 2006) and 'mobility potential' (Kesselring 2006). All three concepts lay much more emphasis on social capital and the decisions of the individual and less on the formation of assemblages than I have. Although social capital is a third form of capital described by Bourdieu, after economic and cultural capitals, the largely descriptive ways in which it is discussed mean that it loses the dimension of class power that is implicit in Bourdieu's theory

of the forms of capital. Kaufmann's concept is explicitly intended to link social and spatial mobility and identifies access, competence and appropriation as elements of individual motility. He and his colleagues claim motility as a form of capital that can 'be mobilized and transformed into other types of capital (i.e. economic, human and social capital)' (Kaufmann *et al.* 2004: 754). Their claim for motility as a concept that works at the micro- (household, individual), meso- (groups, networks) and macro- (business corporations, nations) levels ambitiously seems to encompass all aspects of mobility as a social and geographic topic. Kesselring's concept of 'mobility potential' is more focussed on the individual's access to the resources to cope with the 'mobility imperative' (2006: 271) and is derived from Kaufmann's initial formulation of motility as: '. . . the system of mobility potential. At the individual level, it can be defined as the way in which an actor appropriates the field of possible action in the area of mobility and uses it to develop individual projects' (Kaufmann 2002: 1, quoted in Kesselring 2006: 272). In their concept of 'network capital' Urry (2002) and his colleagues (Larsen *et al.* 2006) more specifically link mobility to the social capital that comes from the networking enabled by being mobile. The business and social contacts made through real or virtual travel contribute to the wealth and power of those involved. Urry (2002) emphasises the social value of 'meetingness' and the importance of social networking for social and economic life, but not the inequality of access to mobility that amplifies power differentials. Social networks, Larsen *et al.* argue, are becoming 'more distant' and the investment in social relations through a blend of travel and communication extends sociality to produce a new form of capital: 'network capital' (Larsen *et al.* 2006: 168). This is a form of social capital linked to a 'sociality with objects' that includes not only means of transport but also those of communication. In these various conceptualisations of mobility as a social resource that is realised in a variety of ways by different actors, there is much common ground. However, the term 'mobility capital' that I have chosen to use is intended to emphasise spatial mobility and to connect specifically with Bourdieu's forms of capital in emphasising their role in the class formation of contemporary societies. Mobility capital is a privilege that is not available to everyone equally and is linked to wealth and power and the ways that these are passed on in class-structured societies.

Conclusions

Is it better to be a driver or to be a passenger? I have argued that how mobility assemblages distribute agency distinguishes the driver from the passenger. The driver must have a mode of agency that I've called *intentionality of progress* and the passenger must have a mode of agency that I've called *intentionality of purpose*. For any person to realise mobility in the late modern world, they have to either accumulate or gain access to mobility capital that can form an assemblage that can realise both modes of agency. A collective organisation such as a transport authority can make mobility capital available that matches the intentionality of purpose of those who wish to be mobile and have sufficient money to buy a seat. But the lack of capacity for controlling and directing the mobility capital means that the bus passenger has a very different mobility status than the chauffeured business executive. To maximise the capacity to realise intentionality of purpose the individual may prefer to accumulate personal mobility capital. At best this will involve handing over responsibility for progress to other agents (car and chauffeur, driverless car, taxi, bus), retaining as much control over the deployment of capital as can be afforded. Taking on responsibility for progress in an assemblage may increase control over mobility, provided the individual has accumulated sufficient mobility capital (car owner, cyclist, shoe wearer).

In this brief account of the difference between drivers and passengers I have not been able to address the pleasures and possibilities associated with driving a car (Hagman 2010) or those associated with being a passenger (Bissell 2010; Watts 2008). The driver has an emotional orientation to interaction within the car, with other road users and to the road itself, that is an aspect of the skill needed for intentionality of progress (Katz 1999). These skills confer social status on the driver (Best 2006), who is then drawn into the complex social organisation of driving (Redshaw 2008); so it is not surprising that in Saudi Arabia women feel that it is worth risking imprisonment to claim the independent status of being a driver. But as the socio-technical culture changes in western societies with less 'freedom' to drive due to road congestion, speed restrictions, and the increasing capacity of the car to drive itself, we will have to look to other social and material arrangements to acquire status and pleasure. It is not so surprising that the numbers of new drivers and new cars are falling.

Notes

- 1 'Number of cars declines for the first time since the Second World War', David Millward, *Daily Telegraph*, 7th April 2010, www.telegraph.co.uk/motoring/news/7563297/Number-of-cars-declines-for-the-first-time-since-Second-World-War.html (accessed 5th October 2011); 'The end of motoring' Alex Rayner, 25th September 2011, www.guardian.co.uk/politics/2011/sep/25/end-of-motoring (accessed 5th October 2011).
- 2 After rising from the 1950s to a peak of over 3.2 million new registrations in the mid-2000s, the number dipped to 2.4 million in 2009, the lowest figure since 1995. After rising to a peak in 2005–6 of 1.8 million practical driving tests taken, the number fell to about 1.5 million in 2009–10. The average annual mileage of four-wheeled cars has decreased from 9,700 miles in 1995/97 to 8,420 in 2009. Transport Statistics Great Britain Vehicles: 2010 DOT, www2.dft.gov.uk/pgr/statistics/datatablespublications/tsgb/latest/tsgb2010vehicles.pdf (accessed 5th October 2011).
- 3 An economic downturn with global effects began in a number of industrialised countries in 2008, and by 2013 recovery from recession has not been sustained, leaving many western economies in an austerity mode as state sectors shrink, real wages and pensions fall and private investment is very cautious.
- 4 Deleuze and Guattari's (1988) notion of the 'machinic assemblage' points to the ways in which human beings are combined with material components to form entities with different properties, both material and social, that are greater than the sum of the component parts. Their concept is more extensive and fluid than the way that I am using the term here; theirs builds from the multiplicity of entities, social and material that together have desire and direction, speed and agency and act as an interface between strata.
- 5 The person in the police van who has been arrested or the air passenger who is the subject of 'special rendition' has no intentionality of purpose or of progress; they are simply prisoners of someone else.
- 6 'Google tests cars that drive themselves' BBC News, www.bbc.co.uk/news/technology-11508351 (accessed 19th October 2011).
- 7 The term has also been used in a rather different way in migration studies, apparently coined by Gesser and Olofsson (1997): 'cosmopolitans possess "mobility capital" – resources, knowledge and abilities that facilitate social as well as geographical mobility (formal education seems of particular importance in this regard)' (Gustafson 2006: 245).

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