INSIDE THE MIND OF A CABBIE



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ABOUT THE RSA

The RSA is an enlightenment organisation committed to finding innovative practical solutions to today's social challenges. Through its ideas, research and 27,000-strong Fellowship it seeks to understand and enhance human capability so we can close the gap between today's reality and people's hopes for a better world.

In the light of new challenges and opportunities for the human race our purpose is to develop and promote new ways of thinking about human fulfilment and social progress which speaks directly to our strapline — 21st century enlightenment.

RSA Projects put enlightened thinking to work in practical ways. By researching, designing and testing new social models, we encourage a more inventive, resourceful and fulfilled society.

A man takes a job, you know? And that job — I mean, like that — that becomes what he is... You do a thing and that's what you are. Like I've been a cabbie for thirteen years...

Taxi Driver (1976)

- 1 Shell Energy Scenarios to 2050: An Era of Volatile Transitions, Shell International 2011
- 2 'Efficiency' is a contested term which we will examine in more detail in our final report, but here it simply means that the energy is not wasted.
- **3** Forum for the Future, *Smarter drivers, Smarter choices*, 2010
- 4 The full set of tips are included in Shell FuelSave Tips by Peter Adams, Engine and Vehicle Technology Scientist, June 2011: 1.Choice of fuel matters 2.Drive smoothly 3.Use higher gears 4.Avoid excess idling 5.Avoid over-revving 6. Avoid high speeds 7. Keep your distance. 8.Conserve momentum 9.Use cruise control 10. Avoid excess weight 11. Keep your tyres at the right pressure 12.Use air conditioning sparingly 13. Keep the windows closed. 14. Remove your roof rack 15.Plan trips carefully 16.Avoid rush hour 17.Use the correct oil. 18. Check your air filters 19. Tune and service your engine.
- 5 For the importance of behaviour becoming habitual, please see the forthcoming report from the RSA Social Brain Project, provisionally titled: 'Socialising with the Brain: Reflexive Solutions to Adaptive Challenges'. For the power of social diffusion, see the RSA Connected Communities Report: http://www.thersa.org/_data/assets/pdf_file/0006/333483/Connected Communities_report_150910.pdf

EXECUTIVE SUMMARY

Shell's energy scenarios up to 2050 include a foreboding 'Scramble' scenario in which the path of least resistance in the present leads to heightened global tensions over fuel. However, there is also a 'Blueprints' scenario in which 'coalitions of interests' begin to adapt to the scale of the challenge, and positive outcomes are built up from the distributed pursuit of individually modest opportunities and objectives.¹

This paper speaks to these modest but very necessary opportunities and objectives, and forms part of the effort to shift the public mood in support of the long term solutions needed to deal with anthropogenic climate change. In this respect, while energy scarcity is an issue for everybody, some feel the pinch of this scarcity more than others. Those who fill up their fuel tanks on a daily basis as part of their working routine, like taxi drivers, are particularly motivated not to waste fuel, and their attempts to use fuel efficiently might therefore serve as an instructive example to the rest of us.²

This report examines the experiences, attitudes and working habits of ten taxi drivers taking part in a national campaign to promote fuel efficient driving, supported by Shell. The campaign is built around a competition in July 2011 between twenty cabbies, all of whom have received information on fuel efficient behaviours. The driving behaviours of sixteen of the twenty participating cabbies are measured by telemetry, while four drivers are self-assessed, to explore the impact of different kinds of feedback. The sample of ten drivers examined here received some additional help to change their behaviours through their active engagement with our research process, a behaviour change workshop on June 16th hosted by the RSA, and the design interventions that were co-created at that event. Section five of this report outlines how we attempted to make use of the findings below to target our behaviour change interventions and help them to save fuel.

FUEL EFFICIENT BEHAVIOUR AS AN ADAPTIVE CHALLENGE

Climate change is partly a technical problem, in that it has well defined quantitative dimensions that can be targeted by technological and policy interventions. Yet the human dimension underlying the technical problem means that climate change is more profoundly an adaptive challenge, requiring changes in attitude, values and behaviour on an unprecedented scale.

This distinction between technical solutions and adaptive challenges is important for this project and climate change more generally. Indeed, according to Harvard Professor Dan Heifetz, the most common failure of leadership involves failing to grasp it. Technical problems can be simplified, instrumentalised, and addressed with familiar tools, but adaptive challenges like climate change require us to face up to complexity, and require fresh human reflection, responsibility and insight. This interim report speaks to the kind of under-labour required to think about energy use and misuse as an adaptive human challenge, by gaining a deeper understanding of a particular sub-set of motivated energy users.

Following from Shell's 'Smarter Drivers' campaign in 2010,³ which focused on disseminating information on fuel efficiency, the RSA is seeking to deepen our understanding of how we might assist in turning helpful information about fuel into enduring dispositions for drivers. Shell's fuel save tips comprise nineteen pieces of advice, ranging from choice of oil, driving speed, car weight, personal comfort and journey planning.⁴

As an exploratory pilot study, we chose to focus the enquiry on the fuel efficiency of hackney carriage drivers. Taxi drivers seemed an ideal target group, not merely because of their professional interest in reducing costs, but because their professional identity involves their driving expertise and their singular capacity to influence passengers.

Some of the Shell tips have limited relevance to cab drivers (e.g. roof racks) and most are quite familiar, described by the drivers as 'common sense'. However, knowing something and doing (or not doing) it are very different things. The key question for this project is what we can do with information to help make a more enduring impact on behaviour. The RSA are particularly interested in the potential for positive behaviour change to become habitual, so that it can be performed without prompts or conscious thought, and contagious, such that it spreads through social diffusion to other drivers and passengers.⁵

METHODOLOGY

In order to understand how cabbies in particular might drive more fuel efficiently, we wanted some insight into their lived world, to make our behaviour change interventions more grounded and focused, and, crucially, so that the cabbies themselves felt like active participants in the research, and not merely passive subjects.

The RSA commissioned in-depth qualitative interviews with ten taxi drivers in their normal working environments, including accompanied journeys and close observation of driving behaviour. Shortly afterwards we hosted a focus group with the drivers in London, seeking to encourage discussions between the cabbies on their typical work challenges and existing efforts to save fuel.

In this interim report we are interested in:

- Cabbies' personal views and outlooks: what do they think and care about?
- Taxi driving as a profession: what separates the driver of hackney carriages from other driving professions? Are taxi drivers operating a private business, performing a public service, or doing an uneasy mixture of the two?
- Taxi drivers as a community: what do cabbies think of each other? Do drivers compete with each other for trade, or cooperate in line with accepted norms?
- Typical driving behaviours: do they have any particular existing habits they could change if they wanted to?
- Attitudes to behaviour change in the context of climate change: could cabbies see themselves as part of the climate change problem or solution?

The answers to these questions helped us to design our behaviour change interventions, at the RSA Steer workshop on June 16th, and we have mentioned these connections throughout the report and in the conclusion. This interim report is based on a thematic analysis of the available qualitative data, and will inform a more comprehensive final report on fuel-efficient driving behaviour, including telemetry data from the national competition, due to be published by the RSA in November.

KEY INDICATIONS FROM PRELIMINARY RESEARCH

Taxi drivers appear to demonstrate a complex mix of attitudes and outlooks. They are self-interested but also public-spirited, sometimes tribal but also mannerly, generally fatalistic but also motivated, strongly opinionated but with the capacity for open-mindedness, aware of climate change but unmoved by it, and very much aware they can drive more fuel efficiently, but don't always do what they should, while remaining unsure if it would save them money in any case. In overview, *Cabbies are:*

... Working for their families

The overriding motivation for personal success strongly emerged as the desire to do one's very best for one's family. All the drivers who have children are socially ambitious for them, with some drivers educating their children privately, and others supporting their children through university.

"Until you have kids, you don't really understand it. You'd do anything for them, you'd give your life for them. I told my son, don't worry, whatever you need, a liver, a kidney, I'll give it to you."

...In it for the Money

While many of the drivers appeared to be socially engaged, and showed a strong concern for treating their passengers fairly, there was a clear sense that the bottom line was financial.

"We're all in it to make money — with responsibility of course."

...Fatalistic

Many cabbies have come into the profession due to circumstances beyond their control (e.g. job loss) and there are many aspects of the job beyond the cabbies' control (traffic, passengers, road works) so they develop equanimity in the face of shifting working conditions.

"When you get one [low-paying fare] after another, after another, and you know your day's wiped out."



"I take it a day at a time — if it happens it happens."

"The taxi god we call it."

...Patient

Drivers often have to wait for hours before picking up a fare. Only about a third of their working time is paid for, with the rest being waiting time or 'dead mileage'.

"If you drive a taxi you have to be very, very patient; nice people, bad people, traffic, accidents, everything — you have to be very patient."

...Independent

The feeling of autonomy is a major motivating factor, particularly being able to work whenever they like, and not being told what to do.

"You're not looking over your shoulder, you know... there's no one to tell you what to do."

... Ambassadorial

Most drivers expressed some fondness or allegiance for the place they work, and were aware that they were often the first people that visitors to their cities met. Many aspired to be ambassadors for their city.

"I like to make sure my passengers have a comfortable ride so they use me and my firm again and have a good impression of Birmingham."

...Tribal

The drivers defined themselves as a group, principally in opposition to other driving professionals, viewing private hire vehicles as rivals and bus drivers as aversive.

"You find that... a lot of people go into private hire driving in a recession, which dilutes the work for the hackney carriages as well."

...Mannerly

There appear to be subtle codes of etiquette among taxi drivers, and a shared sense of what 'doing the right thing' looked like on the road, with passengers, and why this spirit of public service is integral to the job.

"I treat people carefully. If it's a bad job, you just get on with it. The tip might be bigger at the other end. We're disappointed, but unfortunately there's a hardcore of people who'll slam doors, throw cases in... it's not funny, cos it's affecting our lives."

... Deeply concerned about the cost of fuel

Taxi drivers are acutely aware of how much mileage they get for their fuel, and troubled by the fact that the ratio of cost to profit is much less favourable than it used to be:

"I used to work off £10 and make my target, and since then I've had to double that and work longer hours to get what I want back."

... Waiting for more fuel-efficient vehicles:

While this project is about fuel efficient driving rather than vehicles, it is noteworthy that all the drivers felt the main barrier to fuel efficiency was the nature of the vehicles they had to work with:

"...Perhaps we should be attacking it from the other end; let's get some fuel efficient vehicles as taxis instead of the dinosaurs we drive at the moment that does 25 to 30mpg [miles per gallon] if you're lucky. I would like to be given the choice in Manchester, I'm sure people in London may like to be given the choice... there are a lot more vehicles that are fuel efficient"

... Ambivalent about climate change

The drivers' attitude to climate change developed in the course of discussions. Initially it was described by most drivers as an abstract and contested issue of limited relevance to their daily lives, but most drivers did feel it was likely to be a major issue in the future, and were concerned about the implications for their children.

"I think people are generally quite selfish, and it's got to be something that really affects them before it drives it home."

"...Where we're taxed massively for this climate change, you've got China laughing all the way to the bank with 6% growth and the biggest economy of the world. We're doing our bit and I'd like to see everybody do their bit."

... Aware of fuel-efficiency measures, but unsure of trade-offs

As expert drivers, the cabbies were aware of many of the ways in which they might save fuel, but they focused almost exclusively on tips relating to speed, starting and stopping, and often framed decisions on these issues as trade-offs in terms of other demands of the job:

"We all know how to drive fuel efficiently, we all know how to get more miles to the gallon, but unfortunately it's a compromise to get 80mpg or an extra job a day, and I would happily drive along the Broadway at 40mph so long as cabs didn't overtake me at 60mph, so that I'm 20 places back in the queue at the airport."

'If you are not part of the solution, you are part of the problem', is entirely misconceived... If you are not part of the problem, you cannot be part of the solution.

Bill Torbert⁶

- 6 In Solving Tough Problems: An Open Way of Talking, Listening and Creating New Realities. Adam Kahane 2004 (83-84) Berrett-Koehler 2004
- 7 Steer: Mastering Behaviour Through Instinct, Environment and Reason, Matt Grist, RSA 2010
- **8** See http://www.tfl.gov.uk/corporate/media/newscentre/archive/8458.aspx
- **9** See http://www.energysavingtrust.org.uk/business/Busin
- **10** Forum for the Future, *Smarter drivers*, *Smarter choices*, 2010

INTRODUCTION: WHY GET INSIDE THE MIND OF A CABBIE?

A core element of the current project involves applying the RSA's **Steer** approach to behaviour change, and principles of co-creation. In contrast to 'nudge' which focuses on our automatic systems, and 'think' which focuses on our controlled reflective system, Steer takes a reflexive and holistic approach to behaviour change. Our approach is holistic in that we believe in working with both controlled and automatic aspects of our behaviour, and it is reflexive in that it attempts to generate a kind of recursive self-awareness, in which knowledge about our own natures helps us to shape our own environments, interactions and behaviour in ways that are aligned with a truer understanding of ourselves and our relationship to others.⁷

Co-creation is also central to our approach. In order to help cabbies implement Shell's tips on fuel-efficient behaviour we want to work not for them or on them, but *with* them, to design prompts, props or other kinds of physical or audio interventions that will remind them or habituate them to the kinds of driving behaviour they seek to change. In light of these two approaches to changing driving behaviour, it was imperative that we better understand the people we seek to work with.

Though not one of the largest contributors of greenhouse gas, taxis are nonetheless significant polluters. For example, they account for 4% of CO2 emissions⁸, 12% of nitrogen oxides and 24% of particulate matter in central London⁹. This polluting effect of taxis could be reduced if drivers altered their driving behaviour; changes in driving behaviour could reduce fuel consumption by around 27%.¹⁰

Encouraging people to change their behaviours is difficult, but could be more successful if we start from a richer understanding of cabbies' attitudes, beliefs and behaviours. In what follows we outline the key themes that emerged from the first phase of the research, including some thoughts on what might follow in terms of likely interventions.

11 http://www.tfl.gov.uk/businessand partners/taxisandprivatehire/1412.aspx

12 Maguire EA at al 2006, London Taxi Drivers and Bus Drivers: A Structural MRI and Neuropsychological Analysis, Hippocampus 16(12):1091-101.

1. FREEDOM RIDERS

"NEVER LATE FOR WORK!"

Many of the cabbies have a history of professional driving (mini-cab, bus or delivery) but drive taxis now because **they love the flexibility and independence**. Indeed the experience of autonomy appeared to be a central motivation for the drivers. Driving taxis allows cabbies to pick their hours of work, feel free of orders and bosses, choose where and how they work, fitting work in around social engagements and leisure time. This experience of autonomy was captured neatly by one driver who remarked that he could never be late for work, while another described them as 'free spirits':

"As a group of people, we are an odd bunch. And we'd be almost unemployable. You're a free spirit... And that makes you... well I wouldn't say a loner. But you can come and go as you please."

This insight suggests we should be wary of giving direct instruction to the cabbies, and **should** avoid presenting material in a way that would undermine their sense of autonomy. Whatever the advice on fuel efficiency is, we should try, as far as possible, to make the drivers feel that they are opting in to it voluntarily rather than doing it because they have been told to.

"THE TAXI GOD"

But this independence also comes at a cost, and taxi drivers often have sole responsibility to earn a living, leading them to work long days and unsociable shifts. In response to a question about how much control they have over their work, one remarked that **they are at the mercy of the 'taxi god'**, who determines whether their next fare is high or low value — or even a problem passenger. The other drivers recognised this description, with one suggesting to great amusement (but without justification) that "the taxi God is a woman".

'THE KNOWLEDGE'

All licensed taxi drivers need to pass a special test before they can drive one of the famous black cabs. This test is called 'the Knowledge' and is widely recognised as being hardest in London. How long it takes to become a licensed taxi driver depends on whether you want to be an All-London driver or a Suburban driver. All-London drivers - also known as Green Badge drivers - need a detailed knowledge of London within a six mile radius of Charing Cross. All-London drivers have to learn 320 routes (or runs). They also need to know all the landmarks and places of interest along the runs. It takes between two and four years to pass the All-London Knowledge. Once you are licensed you can work anywhere in the Greater London area.¹¹

A neuroscientific study of taxi drivers, published in 2006, suggested that London Cabbies who have completed the Knowledge increase the functional plasticity of their posterior hippocampus — in lay terms, the part of the brain associated with memory of familiar spaces gets 'bigger'. However, neuronal matter is expensive in evolutionary terms, and it is rare for one part of the brain to grow in volume without some sort of trade off elsewhere. In this case, there is a price to pay for the expertise 'the Knowledge' gives you, because the capacity to learn new routes and lay down new spatial memories appears to be diminished. In lay terms, the part of the brain associated with learning new spaces gets smaller. As the authors of the paper put it:

"We speculate that a complex spatial representation, which facilitates expert navigation and is associated with greater posterior hippocampal gray matter volume, might come at a cost to new spatial memories and gray matter volume in the anterior hippocampus." 12

"WE'RE IN IT FOR THE MONEY"

The drivers have **strong professional identity**, including **a respect for the 'Knowledge'** (see box), a feeling that they provide a 'public service', with many seeing themselves as ambassadors for their city. That said, being a businessman trumps being an ambassador, a factor made more salient in tough economic times.

13 See for instance http://www.labourlist. org/responsibility-in-the-21st-century--ed-miliband-speech

In the focus group we worked with this central motivation to get the cabbies to clarify exactly how much money they would have to save through fuel efficiency to feel like it was really motivating. Fuel efficiency measures are typically presented in percentage terms, which have no real affective impact. Similarly, framing savings over a day or a week is unlikely to have impact because the numbers are still relatively small.

The drivers began by saying that **they think in terms of ratios**, such that for every pound they spend on fuel, they get a certain number of pounds in earnings, so if that ratio can be changed, for instance from 1:8 to 1:9 for instance, they start to feel motivated.

The drivers also suggested it would help to frame the amount saved in terms of discrete costs related to the upkeep of their tyres, insurance, tax etc.

If the amount is stated in monetary terms it **should be a tangible amount**, like £20 a week, so that they can feel its value, or a larger amount over the course of a year so they can imagine spending it on something valuable, like a holiday. In this respect, there seemed to be general agreement that a four figure sum was really motivating.

HARD TIMES

Many taxi drivers have been affected by rising fuel prices:

"Fuel prices have made it harder to earn decent wage in this job. I used to be able to do a shift on only £10 of fuel, now I have to spend £20-£25 for a decent shift."

As well as a fall in demand caused by the recession:

"Companies are finding ways to save money. So there are fewer short trips from the [railway] station to Queens Square... conference calls rather than trips."

Moreover, council cuts have led to the loss of government contracts, and these pressures add to an increase in other costs (taxi, MOT, licence, insurance, road tax etc.) of their profession. More generally **cabbies might be viewed as examples of what Ed Miliband has called 'the squeezed middle'** because they frequently contrasted themselves with people on benefits on the one hand, and the very wealthy, particularly bankers, on the other.¹³

KEEPING IT IN THE FAMILY

The overriding motivation for personal success is the desire to do one's very best for one's family. This is a point the participants feel extremely passionate about, as illustrated by the quotes below. All the drivers who have children are **socially ambitious for their children**: two of the drivers (one of whom did not wish to be named on this point) have privately educated their children, and more still are supporting their children through university.

"Until you have kids, you don't really understand it. You'd do anything for them, you'd give your life for them. I told my son, don't worry, whatever you need, a liver, a kidney, I'll give it to you."

"It makes me happy to see my family do well. I have a good standard of living, I earn money and am quite ambitious and successful in what I do. I have lots of satisfaction."

"Work hard, play hard — and by playing I mean buying the cars I want, spending money on the kids, getting them the things that they want."

We feel we can perhaps play on this desire to do well for their kids through the media attention given to the drivers. The key is to convince drivers that they are fuel-efficiency exemplars for others to follow, which gives them something to be proud of in addition to the money they take home from their shifts. This approach also builds on the idea that they sometimes view themselves as public servants or ambassadors (see below).

2. IN THIS TOGETHER, OR EVERY CABBIE FOR HIMSELF?

COLLABORATION...

Taxi drivers have a strong **sense of identity as a professional group**; they recognise that they're part of a large group of people who do similar work, that they are visible and identifiable, and that each faces a level playing field to obtain a licence:

"We call each other and tell each other where's busy, where's not busy. We're close, you know... We are a community — everyday we see each other. If someone breaks down or needs to change a tyre then you say I can help."

"If it's a driver from another firm then that's a competitor, but if it's a driver from your own firm, then that's your colleague — that's the way I see it"

Moreover, cabbies can become **increasingly united in the face of adversaries**; e.g. a local council that imposes rules or distorts the market, private hire drivers who compete for passengers and sometimes the Police, when they feel rules are imposed unfairly or unevenly.

We hope to build on this latent sense of unity by encouraging the cabbies to use social media throughout the competition, and beyond. For instance, they all faced the challenge of private hire vehicles taking their trade by picking people up off the streets, but lacked a credible means of coordinated action. We will explore whether social media services like Twitter could help them to speak with one voice on such issues.

...AND COMPETITION

But there are tensions in this community too, and some feel that they are also in fierce competition with each other for passengers:

"There's no sense of team, it's competitive, the survival of the fittest — if there is a chance of a few pounds they will take it... I don't have any relationships with anyone specific. I know lads to talk to but they're work colleagues. I don't hook up with them and I do what I like."

There are also some fractious relationships within the community, for example along ethnic backgrounds or related to length of service:

"There's not a lot of PC views and you'd be prosecuted if some things were said outside the ranks... it's nice it can be said... we all have fun poked at us, the problem is when it becomes vindictive. There's a lot of banter, some humorous, some cutting and unacceptable."

This observation chimes with some remarks made about immigration. For instance, one the drivers who migrated to the UK as refugee raised this as an issue for concern. Many seemed worried about the impact of immigration on the labour market in general, as well as the specific impact on taxi driving. Several said they were concerned that their local taxi driving market had been, or could be, 'flooded' by new migrant drivers, especially if the local authority 'deregulated' the industry and issued large numbers of extra licences. The drivers commented that when supply outstrips demand in this way each driver has to compete harder for less work, and usually takes home less money. Many of the older white British drivers, felt immigration had led to a more divided professional community of taxi drivers, and the clear formation of different 'groups' formed on cultural lines.

ETIQUETTE

Cabbies adhere to strict sense of etiquette, including queuing correctly at ranks, not turning down low pay jobs in the hope of a higher pay job and not overtaking other taxis close to taxi ranks. This etiquette manifests in the ways that drivers treat each other on the road:

"In Bristol we all respect each other. If I pass Peter within one mile of the train station then I'll wait until he comes — I don't want to take his job. I know him, he knows me, we all know each other. But there are private companies now."

14 See for instance: Predictably Irrational, by Dan Ariely, Harper Collins 2008.

But also on their relationships to their passengers:

"If they're having a bad day, and you can't make them feel any better, then don't make them feel any worse."

And their own manners:

"You don't curse or swear outside your head, but inside..."

This general idea that 'doing the right thing' is important in shaping decisions is also a key finding in behavioural economics. We often act outside of our strict selfish interest because we are motivated by a certain social norms of fairness and appropriate behaviour, and the cabbies seem to exemplify this trait very tangibly.¹⁴

PASSENGERS AS PAYING GUESTS

Cabbies describe their experience of being in the cab as 'working from home' (see below), and in this context passengers are their 'paying guests'.

Each passenger is a 'gamble', because they may be low or high paying and have good or bad behaviour. However, each passenger is accepted from the 'taxi god', and it's part of drivers' etiquette to accept the luck of the draw, although they reported on 'other' drivers who became upset by low-paying passengers/fares or local 'bell jobs' (low paying fares).

Overall, **cabbies worry about the reputation of the trade**, and they maintain or improve the reputation of taxi driving through their passenger interactions. This service side of the job includes intuiting whether the passenger wants to converse, treating them with politeness and respect e.g. keeping their cab clean, carrying luggage, not talking until they're sure the passenger wants to converse, maintaining suitable boundaries (not discussing 'deep' topics relating to religion or emotions) and dealing with problem passengers in a responsible way. Problem passengers may question the fare/route taken, escape without paying, be drunk (becoming aggressive or comatose in the back), or sometimes abusive for no reason.

Drivers intuit whether passengers want to chat by asking specific questions and gauging the response, or by responding to the passengers' initiative:

"Most of them are nice, they're like 'how are you?', most of them talk... but some of them have had a bad day and they don't want to talk... if I see they don't want to talk I leave them alone."

Contract work with organisations allows cabbies to build up relationships with regular passengers, and such relationship building is viewed as part of the professional skill set, and for a variety of different reasons. In addition to 'treating people right', the old saying that 'you never know who is going to appear in the back of your cab' is a potentially motivating factor.

One driver mentioned that they made a casual suggestion to a regular upmarket customer about what should be on the fourth plinth at Trafalgar Square. He suggested the Queen riding a horse would be ideal, and a few weeks later the same passenger said that he had passed on this suggestion to somebody very close to the Queen who felt it was an excellent idea that he would pass on to Her Majesty. "So if you ever see that in Trafalgar Square, you'll know where it came from", he said.

3. PROFESSIONALLY OPINIONATED

The cultural role of taxi drivers as opinion formers and spreaders has been celebrated and used in a number of campaigns over the years. Whether to spread information about the Tate Gallery or the latest budget, cabbies are associated with firm, sometimes centre-right opinions and a liking for sharing them. Our research gave a slightly more nuanced view, with cabbies adopting definite opinions, but not committing themselves to any part of the political spectrum, and favouring issues that are closer to home:

"I've not got strong political views... but I know the right way and the wrong way... my friends would probably say I'm opinionated."

"None of the issues actually affect me personally. I mean the AV vote, the killing of Osama Bin Laden, it's all out there, and none of it makes a difference to my life directly."

But those issues that do affect them and their families provoke strong opinions, such as the recession, student tuition fees, immigration and sometimes international issues (where the UK's position has an effect on them).

From this finding, we feel there is a place for carefully and constructively challenging certain opinions where possible, with a view to loosening some of the defensive attitudes that might act as a barrier to fuel-efficient driving. For instance, the general opinion on climate change (see below) that whatever they did was dwarfed by what was happening in China is worth challenging with some information about positive environmental stories coming out of China.

CLIMATE CHANGE

Climate change is not an issue which cabbies feel particularly affects them. The issue has a low priority with cabbies, about which they adopt a sceptical stance, though they also express fears it may affect their children, and they seem more likely to change behaviour at home than at work e.g. with the support of their wife or girlfriend.

"For me climate change is a bit too abstract because there are camps saying they have scientific proof, and you have camps saying they have scientific proof it can happen naturally — sunspot theory and so on. But the thing that bothers me is deforestation..."

"You tend not to think about it cos it hasn't affected you. People only tend to get motivated when they start to think 'hang on I'd better do something about this'"

Barriers to changing behaviour in response to climate change include a feeling that governments and big businesses are the ones in control, and that others (individuals and nations) will not change behaviour even if they (cab drivers, the UK) do.

"...We're taxed massively for this climate change, (while) you've got China laughing all the way to the bank with 6% growth and the biggest economy of the world. We're doing our bit and I'd like to see everybody do their bit."

Applying behavioural economic theory, it could be said that drivers view climate change according to three of the major principles of the field. The drivers view the issue with respect to *Salience* i.e. climate change is just not something they think about much on a daily basis. They think of it with respect to *Endowment* (or loss aversion) i.e. they deeply dislike the idea that climate change might lead to things being taken away from them — the pride in *their* profession, the tax on *their* fuel and so forth. Finally, *Reciprocity*, they care deeply that whatever they do, others follow, and frequently state that they do 'their bit'. During our focus group, we challenged drivers to define what 'their bit' really means, and felt that they were more likely to favourably compare themselves with those who are doing even less for the environment than compare themselves unfavourably with those who are doing more.

MERITOCRATS

As might be expected from their profession, taxi drivers value and admire individuals that 'make their own luck' or those they see as pioneers, such as Lord Sugar, Margaret Thatcher, and Rudi Giuliani. Those we interviewed tended to favour a strongly meritocratic society:

"You've probably guessed, I'm not a great socialist... I believe in a work ethic... not a great one for the Nanny State. I think where we've got to in helping people is over the top. I know people who play the system"

Cabbies express **distaste for those who they perceive as lazy**, feckless or gain money through dishonourable work. For example, they regard benefits cheats, 'talentless' celebrities and those who live beyond their means on credit as bad for society.

While pursuing wealth through honest means is applauded, some taxi drivers suspect too many people live an unsatisfying 'hamster wheel' existence in order to attain it. For younger drivers, the motivation to make money and succeed is to enjoy the good life, such as eating out, enjoying parties and buying 'nice clothes'. For those drivers with families, the overriding motivation is to make sufficient money to provide for them:

"Work hard, play hard — and by playing I mean buying the cars I want, spending money on the kids, getting them the things that they want."

"Until you have kids, you don't really understand it. You'd do anything for them, you'd give your life for them. I told my son, don't worry, whatever you need, a liver, a kidney, I'll give it to you."

On the one hand, this perspective suggests that drivers will be motivated solely by the financial savings of improved fuel efficiency, but there is also some latent concern for how climate change might impact on the quality of life for the next generation, which can help to motivate drivers beyond the duration of the competition.

PATRIOTS

Many of the cabbies we interviewed had a **strong emotional attachment to their home city**, even if they were not born there. They often like their fellow residents and say they would 'stick up' for their city and would like to see it receive more investment and prosper:

"I'm definitely proud of here. I was born here, my parents are here, my family's here. Wherever I went, I'd move back to Birmingham."

Sometimes, predominantly among those born in the UK, this local pride extends to the nation. Some cabbies described themselves as enthusiastic royalists, particularly admiring the Queen and other members of the Royal Family. This might well be a function of the salience of the Royal Wedding at the time, but could provide further leverage on the idea that drivers are ambassadors not merely for their city but also their country — a point with particular relevance for those who receive passengers at airports on a regular basis.

VALUES

Key influences on cabbies' beliefs and attitudes include their close family, and sometimes old friends, though it was notable that **they tended to emphasise that they made their own minds up, and remained their own boss**. The cabbies often mentioned the importance of treating others well, and, as mentioned above, showed an appreciation for reciprocity — of doing unto others as you would have things done unto you. Some go further, for instance one uses their cab as a resource to support charitable acts, like taking terminally ill or disabled children to Disneyland Paris.

The role of values is worth probing further because while the conventional wisdom on fuelefficient behaviour is that it represents a win-win scenario of saving people money, while helping to protect the environment, there is an important perspective that challenges this view.

Financial incentives may work well in promoting fuel-efficient behaviour, and saving taxi drivers money, but it does not necessarily follow that financial incentives are the best strategy for tackling climate change more generally. Indeed, many have argued that appealing to financial self-interest reinforces certain values e.g. consumerism, competitiveness, self-interest, that are the root of the climate problem. While one may save fuel in one domain of life, for instance driving, the overall impact is less clear, because the underlying consumerist mindset is not challenged and may even be reinforced, while the money saved might be used to spend on fuel-intensive products or services, for instance long-haul flights.

Right: Drivers at a Steer workshop at the RSA

15 http://assets.wwf.org.uk/downloads/common_cause_report.pdf







Those who argue for this position, including WWF, Oxfam, Friends of the Earth, The Campaign to Protect Rural England and the Climate Outreach and Information Partnership believe that since existing approaches to the climate crisis appear to be failing, we need to try to work more directly to reinforce values that help us to address what they call 'bigger than self' problems like climate change. This strategy involves recognising that while some values are complementary, others are in direct opposition. With this in mind, it could be that attempts to save fuel for purely selfish financial reasons do not in fact represent environmental progress.

We do not have a strong opinion on this issue at present, but feel it is an important one to be aware of, and kept it in mind while thinking of how to help the drivers to help themselves save fuel, for instance by constantly reminding them of the bigger picture on climate change, and their role in reminding passengers about saving fuel.¹⁵

3. WORKING FROM HOME

For the purpose of encouraging and supporting behaviour change, it is important to understand the relationship between drivers and their cab. We know that an individual's immediate environment or habitat can significantly affect their behaviour, and for many cabbies, this habitat is their taxi. We felt that understanding how this relationship was framed would shed light on the kinds of habitat changes that might help cabbies to improve their driving habits.

THE TAXI AS A TOOL

Family cars often become the objects of affection, but some taxi drivers reject the idea that a cab is the same as a family car. They also reject the idea that they become emotionally attached to their cab:

"[My cab is] a workplace, a work tool. It's there to earn money. Look after it by all means, but it's not a lover. It's what I have to use to do the job. It's the same a spanner in your hand, something to do the job."

Taxis are primarily the means by which taxi drivers earn their living. This leads them to care for it for purely business reasons. A well maintained taxi will allow its driver to maximise the time spent on the road. Drivers tend to keep their cabs for two to five years, carefully servicing it:

"I've got 3 cabs, when I buy a new one I drive it for three months myself, then I give it to one of the trackers and I take the old one. It's a piece of machinery, it's there to make money. I treat it well, I service it well, polish it."

FLUFFY DICE & DVD PLAYERS

Although primarily a business tool, some drivers admit they do become attached to their cabs. This is evident when they start to see their cab as an extension of their self. The taxi becomes a reflection of their own values, and their behaviours toward it may change in response:

"I take pride in keeping it clean. I'm always clean myself — it's a reflection of me. People appreciate being in a clean place... I do things properly."

And some drivers go even further:

"I'll be honest with you; I actually love my cab... when I do park the cab up in the queue of other taxis there's that sense of [pride]. You want it to be perfect for yourself when you're driving."

Drivers that think of their cabs in this way may personalise it. One of the drivers we researched has a Union Jack painted on his taxi's front grille while another has more powerful bass speakers (for use when there are no passengers). Other drivers keep mementos in their cab such as bracelets, religious figures and miniature black cabs.

THE OFFICE

But personalisation is always limited by drivers who are conscious that their cab is a public facing space — an area which must be client-ready. Perhaps the most accurate description of their attitude to the cab is that of a home office.

"It's more like an office than a home, mine. Work from within the car. Most of the time you spend there, so I like mine to be neat and tidy. It is your office as well. I don't put any creature comforts in there — no nodding dogs."

Like any office there are parts that are on show and others, like desk drawers, that are private. The taxi driver's drawers are the glove compartment, a hollow next to the gear lever, the side pockets in the front doors, and sometimes a crate on the floor where the passenger seat would be. They are used to store tools of the trade, such as pots of change, stacks of receipts, notebooks to record jobs, and also practical items like a small face towel and sometimes religious aids like a prayer diary.

KEEPING IT CLEAN

Both through our observations and interviews, the **cabbies laid great emphasis on keeping their** 'office' clean. As noted earlier, some feel this reflects on their own personality, but all feel it is an intrinsic part of the service they provide. The drivers we researched tended to clean inside and outside of their cabs at least twice a week, some every other day:

"The taxi is valeted twice a week. I get the exterior done at the car wash, and then I do the interior myself. And my brother does the same. It might have to do with OCD!"

DRIVING A DINOSAUR

Although conscious and proud of the iconic black cab, the more business-minded cabbies express interest in being able to select more modern vehicles to use. These requests are driven by an expectation that other vehicles may consume less fuel and be more reliable:

"Cos when they do 130k, the gear box goes on them, the clutch goes on them, the radiator goes on them, the back axle goes on them. Cos they're dinosaurs as cars. It's predictable what goes wrong."

Another driver remarked that having been a hackney carriage driver for over 30 years, he feels that every new version is cheaper than the one before. It might be that the cabs cannot be produced in sufficient bulk to make quality commercially worthwhile, but it is striking that drivers seeking profit are lumbered with vehicles that oblige them to pay over-the-odds for fuel costs. If the cabbie as eco-exemplar idea ever takes off, there may be an argument for government subsidies so that cabbies are rewarded not just for driving fuel efficiently, but also by driving fuel efficient cars.

"IT'S NOT A CAR, IT'S A TAXI!"

One of the more revealing exchanges in the focus group was when a facilitator asked a question about how the drivers feel about their cars. There was a polite but strong response from one of the London cabbies emphasising that there was a big difference between a taxi and a car. On being asked to clarify, it became clear that taxi drivers may view themselves as **more professional than private hire drivers** of mere 'cars', who are viewed as relatively 'casual', partly because they haven't done the professional exam - the 'Knowledge' — but also because they don't drive a hackney carriage, which therefore functions as a kind of status symbol within the driving community.

TAXI AS HABITAT

We attempted to use the above ideas about drivers' attitudes to their vehicles while planning the session on habits and habitats in the Steer workshop. It was much easier to speak to drivers about the idea that their cars should be viewed as habitats that shape habits in light of the above material.

4. IN SEARCH OF THE MAGIC PUMPS

While the majority of this report explores the attitudes and worldview of tax drivers, the ultimate aim is to encourage more fuel-efficient driving. This section explores the current driving behaviours uncovered by our research, and some of the incentives that could provoke more fuel-efficient behaviour.

SMOOTH DRIVING

Common words used by cabbies to describe their driving style include "*steady*", "*relaxed*" and "*smooth*". Smooth driving is prized for a number of reasons, including giving the passenger a better experience:

"You know it's better to pull away slowly... that it's more comfortable for your passenger."

Cabbies also regard themselves as highly competent drivers. They are able to multi-task, enjoying detailed conversations and maintaining eye contact with our researchers while driving on busy roads. Cabbies were also observed making notes, taking telephone calls (via headsets), using satellite navigation systems and listening to the radio while driving. Cabbies also suggest they are able to reduce the likelihood of becoming involved in an accident through their driving abilities:

"I avoid an accident at least once a day, thanks to my driving skills. You can't fault taxi drivers for their driving ability. They are technically very good."

WHAT DRIVES DRIVERS

Driving behaviours tend to be unconscious, and are motivated by a number of personal, social and infrastructural factors. At a personal level, they are incentivised to drive slowly to consume less fuel (examined in more detail below) but also to maintain a clean licence and prevent damage to their cab and other people:

"[Before you become a cabbie] you don't worry about 1 or 2 points on your licence. Now I worry more. This is my job, this is my income. If I don't have a job, I don't have a home... I don't want to go back to being on the dole."

A number of social factors affect their driving behaviour. Other drivers on the road may also have a small effect on some cabbies, who feel under pressure not to hold up cars that accelerate behind them. Cabbies also recognise that if stuck in traffic or with an unpleasant passenger, they may become grumpy, and their driving style will suffer as a consequence. Or their **passengers may put pressure on them to drive faster — though most have strategies to deal with these requests**. One cabbie asked his passenger whether they would be prepared to pay the speeding fine if they were in his place, and another drove within the limit, but took corners slightly faster, to give the impression of extra speed:

"Even if a customer is in a rush I won't put myself at risk. It's not worth 3 points on the licence. I'll say 'I'll go as fast as I can.' Customers try to put you under pressure but they can only do it if you allow them to."

Cabbies also alter their driving style in response to their terrain. Some cities have more hills than others, which demand greater acceleration to navigate. In poor weather, cabbies are more cautious — not necessarily on their own account, but out of mistrust of other drivers:

"I drive very differently in snow — much, much slower. You have to here, 'cos no one in England knows how to drive in the snow."

This kind of insight is useful, for instance we could ask drivers to place something in their vehicles that may remind them of the care they use when driving on snow. The point is not to make them drive needlessly slowly, but to reflect on the kinds of prompts that would automatically lead them to drive more carefully.

'SAT NAVS'

In the focus group we provoked the cabbies by suggesting that their status as expert drivers with important spatial knowledge may be undermined by satellite navigation systems, commonly called 'sat-navs'. This issue proved not to be as sensitive as we thought it might, with most cabbies saying **sat-navs were useful when they went outside the local areas they were used to**, and that they only needed to put it on 2 or 3 times a day.

One cabbie also made the important point that sat-navs currently suggest routes that are often hugely fuel-inefficient and time consuming precisely because they lack fine grained local knowledge and a feeling for the ebb and flow of traffic in particular areas. Moreover, it was argued that what the 'Knowledge' gives you that the sat-nav could not (yet) was the use of buildings and landmarks to orient oneself when planning a route.

FUEL-EFFICIENT DRIVING?

One of the main ways in which drivers can save more fuel is simply to drive as 'smoothly' as possible, and at lower speeds. Awareness of these basic techniques seems fairly high, raised through articles in the general and taxi trade press as well as word of mouth. However, actual performance of these behaviours is more patchy:

"When I'm driving, I do take it easy. And I see other cabbies booting it around. And then they complain that they are filling up regularly. And when I tell them how much I'm spending per day, theirs is like double mine. I'm an easy driver."

Many drivers doubt whether there is a financial benefit to driving in a more fuel efficient way, perhaps due to genuine competitive pressures of being a cabbie:

"We all know how to drive fuel-efficiently, we all know how to get more miles to the gallon, but unfortunately it's a compromise to get 80 mpg or an extra job a day. I would happily drive along the Broadway at 40mph so long as cabs didn't overtake me at 60mph, so that I'm 20 places back in the queue at the airport."

The counter-point here would be to say that fuel efficiency is not always the same thing as driving slowly, and indeed, Shell's fuel saving tips include the advice to drive in as high a gear as possible. Beyond driving style, cabbies were aware of other fuel efficient behaviours, but again were reluctant to engage in them, for example using air conditioning, which consumes 8-10% more fuel:

"But I will always have air-con on if it's hot. Even though it uses a bit more fuel, you need it to stay cool."

Shell has clear guidelines about the relative importance of these kinds of fuel-efficient behaviours, which we will examine in more detail in our final report.

MAGIC PUMPS

Keenly aware of the cost of diesel, cabbies recognise that financial savings are the primary incentive, with one admitting to a level of superstition, and a few others nodding in assent:

"I go to the same garage, the same pump every day because I'm convinced I get a good measure from there... I'm very superstitious about pump number six."

Beyond magic fuel pumps, cabbies suggest that although awareness of the things you are supposed to do is high, awareness of the full cost-saving potential over time is low:

"Some people aren't aware of the difference it makes. If it has the potential to reduce your fuel bill by 15% then it adds up and starts to make a difference... if you can say it will save you £7000 then you're more likely to listen... it's like if you say to someone if you give up buying coffee from a café it will save you £1500 a year, and suddenly it looks like a holiday... same with smoking costing you £5-6K a year"

The cabbies also reported that drivers are more likely to take action when information is communicated in a visual chart, and that cabbies are likely to fall in line with prevailing social norms, so will copy the behaviour of others quite naturally.

However, being fully objective it is **important to recognise potential challenges to cabbies developing more fuel-efficient behaviour**, particularly the increasing scarcity of passengers, increasing competition from private hire vehicles, the reliable fares being at ranks encouraging drivers to rush back to ranks. A further potential challenge may be drivers' general resistance to instruction.

5. INTERIM CONCLUSIONS: HOW CAN WE USE THESE INSIGHTS TO ENCOURAGE FUEL EFFICIENT DRIVING?

The understanding of cabbies presented above helps us to frame the strategy for helping them to change their behaviour. The point is not for us to devise new levers to pull that will directly solve the problems they have in saving fuel (technical solutions) but rather to offer these insights to the cabbies to help them understand and address their own particular adaptive challenges.

This research has also helped us to communicate behavioural principles to taxi drivers, while also allowing them to become more reflexive about their own natures and behaviours, and better able to design physical changes to their habitats in ways that will hopefully help them save fuel.

The above findings helped to inform behaviour-change interventions with taxi drivers at the RSA Workshop on June 16th, where we were mindful of the following issues:

- Due to their recognition of the gap between knowing they should do something (e.g. drive smoothly) and actually doing it, the focus was not on information dissemination but on understanding that our brains can be viewed as two systems, like a pilot and an auto-pilot, and that the challenge with information is that it often only reaches the pilot, but has no impact on the auto-pilot. Given that most driving behaviour is automatic, the key is find ways to shift habitual behaviours, which is why the workshop focused strongly on the relationship between habits and habitats.
- In light of the strong awareness of other drivers, and their explicit acknowledgment that this was an influence on their behaviour, behaviour change suggestions should involve raising awareness of social contagion rather than explicit instruction. We therefore concentrated a whole half-hour session on social norms and the power of social networks. This device was partly to motivate drivers to overcome their fatalistic tendencies by showing that what they did had the potential to influence not only their passengers but also the people their passengers influenced i.e. that they may have great power to affect change.
- We also felt it was very important to frame financial savings in tangible terms i.e. as a potential holiday, as the payment of discrete costs, and so always tried to stage the value of fuel efficiency in these more tangible terms.
- There is a big challenge but also an interesting opportunity to consider imaginative ways to tap into the civic pride and ambassadorial role that drivers already latently feel. This was a further reason to emphasise the potential for drivers to be exemplars and spread fuel efficiency through their good example.
- Likewise, there is already a strong public service ethos, but we need a deeper framing of what that might mean in practice. This might involve a change in transport policy, or public subsidies to cabbies contingent on them promoting certain government policies, for instance on public health or indeed fuel efficiency.
- Although telemetry data is the default measure in the competition, we decided to measure some drivers' fuel efficient behaviour differently, asking them to fill out a short daily manual log, and requiring them to keep an audio diary of major observations and insights on their attempts to save fuel. We hypothesise that the small investment of time to record fuel used throughout the day might serve as a helpful commitment device, by making the feedback more tangible and meaningful to the driver. The process may heighten the reflexive process that is integral to the Steer approach to behaviour change, by connecting the requisite self-awareness involved in changing habitual driving behaviours with the self-awareness involved in experiencing the rewards of those changes.
- While there was little perceived value in tackling attitudes to climate change directly, we did want to open the cabbies up to the idea that their existing views on the matter may not be fully formed or grounded in sound evidence. The point was to suggest that whatever changes they made had value beyond the competition.

Our final publication, forthcoming in late Autumn, will report back on the cabbies' reactions to these training methods, and also on how they informed particular interventions, and what impact these had on their performance in the competition, which will begin on July 4th.