Mind Shift, Mode Shift: A Lifestyle Approach To Reducing Car Ownership and Use, with Behavioural Economics

Stephen Young
Carfree Cities York Conference
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 Agenda

• Biography: Background and Foreground
• Starting Points: A Carfree Journey
• Traditional Economics
• Behavioural Economics
• Behavioural Economics and Car Ownership and Use
• Some Key Concepts & Examples
• Questions, Follow Up, Contact
BIOGRAPHY
Background

Current:
• Senior Lecturer in Economics, Brighton University Business School
  – teaching undergrad and postgrad courses in behavioural economics. Research area: behavioural economics.
• Senior Telecom Expert, International Telecommunication Union (ITU), a specialized UN agency
  – currently writing a study on climate change, ICTs and ICT regulation
• Founder/Director www.ictandclimatechange.com

Background:
• Senior roles in regulation, policy and strategy in the energy and ICT industries.
• International track record in advising, consulting, publishing and research.
• Long term interest in sustainability, esp. behaviour change needed for move to low carbon economy.

Other:
• Member: Brighton & Hove City Council Sustainable Transport Partnership.
• Member: Transport Group, Transition Brighton and Hove.
• Local supporter: Living Streets Brighton & Hove.

Contact/websites:
• email: s.young@brighton.ac.uk
• website: www.giveupyourcar.com
• blogsite: http://livingthecarfreelife.blogspot.com/
• booksite: www.thefourwheeldetox.com
STARTING POINTS: A CARFREE JOURNEY
A Carfree Journey

I gave up my car - by choice - in 1995, and I haven’t owned a car since.

However, I have, when required, driven cars, vans and mobile homes….
My Car and the Planet

“The great car economy.”
Margaret Thatcher, 1990
My Car and the Planet
My Car and the Planet

Some Car Facts:
• Worldwide, there are 600 million cars – forecast to grow to 2 billion by 2030
• Cars kill over 1.2 million people every year.
• By 2020, road traffic accidents could outstrip stroke and HIV as one of the main causes of preventable deaths
• Cars are a major, and growing, source of Green House Gases
• The infrastructure to support cars destroys urban and rural communities

Summary:
• My car is bad for the Planet
My Car and Me

• Owning a car means:
  – being £000’s worse off (or working longer hours)
  – more likely to be overweight
  – running a relatively high risk of being killed or injured in a car crash
  – using a lot of time
  – hassle

• Summary:
  – My car is probably bad for me
WARNING: TOO MUCH INFORMATION CAN HARM (AND CAN FAIL TO HELP CONSUMERS TO MAKE CHOICES AND CAN IMPOSE COSTS ON BUSINESS, DECIDE THE FACT)

An interim report by the Better Regulation Executive and National Consumer Council on maximising the positive impact of regulated information for consumers and markets

July 2007

If Only….
The Four Wheel Detox

• Evidence-based evaluation of the costs of car ownership to the individual car owner: relatively unexplored impacts include factors such as:
  – financial costs
  – likely weight gain
  – health consequences
  – increased stress
  – impact on children
  – risks
• Conceptual frameworks, analytical methods, and behavioural insights from social marketing and behavioural economics
• Using a lifestyle approach, with stories, humour and celebrity exemplifiers
• See website: www.thefourwheeldetox.com
“TRADITIONAL” ECONOMICS
“Traditional” Economics

Figure 4.9 A market surplus
When the price is set above the equilibrium, firms are very willing to supply, but consumers are not willing to demand. As a consequence more is supplied than demanded. Firms are left with excess stock. In this case, at a market price of £10, firms supply 2000 units, but consumers only demand 1000 units, leaving a surplus of 1000 units.

Figure 4.10 A market shortage
When the price is set below the equilibrium, firms are not willing to supply, but consumers are very willing to demand. As a consequence more is demanded than supplied. Firms are left with excess demand. In this case, at a market price of £6, firms supply 1000 units, but consumers demand 2000 units, leaving a shortage of 1000 units.

Figure 5.9 Long-run average costs
The long-run average cost curve is simply a collection of short-run average cost curves, illustrating how costs change as fixed inputs change.
“Traditional” Economics
“Traditional” Economics

• In the Standard Economic Model, economic agents are:
  – Rational
  – Motivated by expected utility maximisation
  – Governed by selfishness, not taking into account the utility of others
  – Bayesian probability operators
  – Likely to have consistent time preferences according to their discounted utility
  – Likely to treat all income and assets as fungible

Cars = problem of cars are externalities, market failures
  • eg: Stern describes climate change as, “the largest market failure of all time.”
When it comes to cars, the focus on externality says: what’s the impact of my car on everyone else?
How to solve an externality?
  • taxes, regulation, laws
Hence, need for political will to implement change
BEHAVIOURAL ECONOMICS
Behavioural Economics

• The study of how thinking and emotions affect individual economic decisions & the behaviour of markets.
• Combines psychology and economics.
• Concerns ways in which the actual decision-making process influences actual decisions.
• Relaxes the standard economic assumption that everyone in the economy is rational and selfish – because maybe some agents in the economy are sometimes human.
• Assumes we have limited time and capacity to weigh benefits and costs of decisions.
• Hence, decision making is less than fully rational:
  – people are prone to make predictable and avoidable mistakes.
  – at the same time, decision making is systematic and amenable to scientific study.
Behavioural Economics: Two Systems in Every Person

• “Dual-system models of the human mind are ubiquitous in philosophical discussions of human behavior dating back to the ancient Greeks. In the Republic, for example, Plato contrasts the immediacy of desires….with the broader scope of reason” (Plato, Republic 441e).”

• thence via Adam Smith to Freud and the Neuroscientists, not to mention behavioural economists.
  – Available at SSRN: http://ssrn.com/abstract=539843
Behavioural Economics: Two Systems in Every Person

- Reflective
  - Rational
  - Controlled
  - Effortful
  - Deductive
  - Slow
  - Self-aware
  - Rule following
  - Conscious thought
  - Your second language
  - “This turbulence is bad, but planes are inherently a safe way to travel”

- Automatic
  - Intuitive
  - Uncontrolled
  - Effortless
  - Associative
  - Fast
  - Unconscious
  - Skilled
  - Gut reaction
  - Your native language
  - “We’re all going to die”
BEHAVIOURAL ECONOMICS, CAR OWNERSHIP AND USE
Behavioural Economics and Cars

Spock sees both the real (normally unperceived) costs and benefits of a car:

- Can be convenient (so hire one!)
- Will likely make me fat
- May make me unfit
- Will spend my (total) time
- Absorbs my money
- May kill me
- Is not related to my image & status

Simpson sees the real (and perceived) benefits, whilst discounting the costs of a car:

- Convenient (own one)
- Nothing to do with weight
- Nothing to do with health
- Timesaver
- Cheaper than the alternatives
- Safe
- Status enhancing
Big Brained Pipeds

“Human beings are big-brained bipeds who, while rarely in possession of perfect information, make fast, smart-enough choices based on heuristics which save computation time, avoid frozen stasis and enable action in and on the world.“

New Frame: Car v Car Owner

• Impact of car ownership - on the individual owner (not the world)
  • Your car costs you money, health, time, etc
• Use your car less (or give it up) because it’s better for you
• Re-frame the choices, change the zeitgeist
• New choice architecture:
  • How do I get from A to B?
• Changed awareness
• New role models
• New Default
New Frame:
Car v Car Owner

- It’s about you, the individual
  - not society
- It’s about living better
  - not making a sacrifice
- It’s about thinking differently
  - is car ownership the answer to my travel needs?
- It’s about cool people who don’t own cars
  - Dave Gorman vs Jeremy Clarkson
- It’s about changing the default
  - Think ‘go carfree’, not automatically ‘own a car’
Social Marketing and Behavioural Economics

- Young, S., and Caisey, V. (2010)
- *Mind Shift, Mode Shift. A Lifestyle Approach To Reducing Car Dependency, using Behavioural Economics and Social Marketing*

First published on February 11, 2010 as doi:10.1177/1757913909354154
  - [http://rsh.sagepub.com/cgi/rapidpdf/1757913909354151v1](http://rsh.sagepub.com/cgi/rapidpdf/1757913909354151v1)
SOME KEY CONCEPTS & EXAMPLES
<table>
<thead>
<tr>
<th>Concept from Behavioural Economics</th>
<th>Explanation of Concept</th>
<th>Example</th>
<th>Applied to Re-position Car Owning and Use</th>
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<tbody>
<tr>
<td>Framing</td>
<td>People are sensitive to the <em>framing</em>, or formulation, of the decision problem. The presentation of the data is as important as the data itself.</td>
<td>Consumers are greatly influenced in their decisions by how choices and options are presented to them – a fact that industry has been taking advantage of for years.</td>
<td>“Although I know that my car is probably bad for the planet, I didn’t know that it probably isn’t good for me.”</td>
<td>Car owning and use is not just about the impact on society and environment; it’s about living a better life, not by making a sacrifice but because the personal costs of car owning may outweigh the benefits – is owning a car good for the owner?</td>
</tr>
<tr>
<td>Defaults</td>
<td>If the default is set right, the individual does not need to choose the right decision.</td>
<td>Public transport seems more difficult and inconvenient than jumping in the car.</td>
<td>“I don’t even think about it – I own a car, rather than think about the optimal choices for each journey I make.”</td>
<td>Change the default: don’t automatically own a car; could carfree + hire or car club be a better option?</td>
</tr>
<tr>
<td>Salience: Novelty, Pain and Sunk Costs</td>
<td>Paying cash now is painful. If the cost is already incurred, you might as well forget about it.</td>
<td>Train and bus tickets are expensive compared with the cost of the petrol for each car journey. All the other costs of a car are near-invisible.</td>
<td>“Public transport is expensive. My car cost a lot to buy, but now I’ve got it, I’ll use it.”</td>
<td>Start thinking about how much it costs to own and run a car. A car owner is generally £000’s worse off than a non car-owner.</td>
</tr>
</tbody>
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Salience

• The state or quality of an item that makes it stand out relative to neighbouring items
• Hence, our attention is drawn to what is novel, accessible, painful, simple and relevant…

Ouch!
Salient: The Cost of Public Transport

Mail Online, 4.11.09

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s.young@brighton.ac.uk

Mind Shift, Mode Shift
Carfree Cities York, June 2010

Slide 32
Not Salient: The Cost of Car Ownership

“Direct debits have the strange power of semi-invisibility.”

– Guardian, Second Leader (on BSkyB), 16.6.10
QUESTIONS, FOLLOW UP, CONTACT
What Next?

• Behavioural Economics:
  – recognise the biases
  – construct a new framework
  – design a different choice architecture:
    • what’s the best way to get from A to B?
    • do I really need to own a car for this?
    • think ‘would I be better off (richer, thinner, fitter etc) being carfree?’

• Social Marketing:
  – use the social marketing benchmark criteria to focus on the individual, generate the segments that will act on this information and devise appropriate interventions
    • older people
    • students, etc
Where Next?

- Use social marketing and behavioural economics
- Extend the insights from SM and BE into new fields
- Develop these ideas and insights
- Additional support/funding
- Collaboration invited…
More Reading


(Both available as hardback & paperback)
### Contact and Follow Up

#### Stephen Young, BA, MA
- Low carbon, web-based activities
  - [www.ictandclimatechange.com](http://www.ictandclimatechange.com)
  - [www.giveupyourcar.com](http://www.giveupyourcar.com)
  - [www.thefourwheeldetox.com](http://www.thefourwheeldetox.com)
  - [http://livingthecarfreelife.blogspot.com/](http://livingthecarfreelife.blogspot.com/)

- Biography
  - [http://www.brighton.ac.uk/bbs/contact/details.php?uid=sy14](http://www.brighton.ac.uk/bbs/contact/details.php?uid=sy14)

- Contact
  - s.young@brighton.ac.uk
  - [http://uk.linkedin.com/pub/stephen-young/18/129/316](http://uk.linkedin.com/pub/stephen-young/18/129/316)

#### Vivienne Caisey, MA, FCIM
- Social Marketing specialist
- Training & consultancy
  - Health Services Journal 2008 Award for the UK’s *Best Social Marketing Project* (Project Director for Stoke PCT Smoking Cessation)
  - Training courses throughout the UK for professionals from the public sector, third sector & commercial organisations
  - Fellow, Chartered Institute of Marketing

- Biography
  - [http://www.vivcaisey.co.uk](http://www.vivcaisey.co.uk)

- Contact
  - viv@vivcaisey.co.uk