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An Introduction to Behavioural Economics,  
Government and Digital Media

**The Full Monty**

## Contents

Introduction .....	3
A New Way of Thinking?.....	4
What is Choice Architecture?.....	5
Behavioural Economic Models and their Applications.....	5
Can Behavioural Economics be applied both commercially and politically? 7	
The Impact on Digital .....	8
Information Architecture versus Behavioural Economics: coincidence or similarity? .....	9
The IPA lives and breathes Behavioural Economics.....	10
Is there such a thing as too much influence? .....	10
Conclusion .....	11

## Introduction

In recent years there has been a marked rise in the prevalence and popularity of the field of behavioural economics in the public recognition. Traditional neoclassical approaches to economics held the idea that the public body was essentially rational and forward thinking when it came to making economic choices. It therefore followed that the public would make those choices based on what was best for them in the circumstances. However, there are many documented instances of unpredictable and unexpected behaviour in situations that these original approaches cannot explain.

It is now felt by behavioural economists that orthodox economic models are “too unrealistic and dogmatic”<sup>1</sup> to be applied to such a large body as the general public. The theories of behavioural economics therefore focus on the impact of the individual in order to provide an explanation for this seemingly irrational behaviour. This is achieved by viewing economics and decision-making from a psychological perspective in order to better understand why individuals make the choices they do and so predict future reactions. External factors such as cognitive biases and the contextual framing of the choice are now recognised as being highly influential to the decision outcome.

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<sup>1</sup> Rubinstein, Ariel, ‘Discussion of ‘Behavioural Economics’ by Camerer, Collin’, in ‘Advances in Economics and Econometrics: Theory and Applications’, Ninth World Congress, New York, 2005

## A New Way of Thinking?

This change in viewpoint stems from the work of the psychologist Professor Kahneman. He disproved the rational model of economics in his Nobel Prize-winning work in 2002, when he documented the idea of 'two-system thinking', a concept that underlies behavioural economics and remains pivotal in explaining much of our decision-making behaviour. It is by examining the way a person thinks that we can better understand the intricacies involved in how one makes a decision.

In 'two-system thinking', a distinction is made between two ways of thinking: "one that is intuitive and automatic, and another that is reflective and rational."<sup>2</sup> The automatic system (or System 1) is based on instinct and is very rapid; this is the system used when we react to situations such as ducking from an unexpected object or smiling when you see something cute. The reflective system (System 2) involves much more deliberation and a self-conscious awareness. This is the system used when asked to provide an answer to a maths problem or choosing what route to take on a journey. These two systems tend to be at odds with each other when it comes to decision-making and can result in conflicting responses as your 'gut instinct' might instantly tell you to do one thing and then your conscious thought could consequently disagree. It is possible for System 2 to override System 1 but this is rare as overriding emotion and intuition is uncomfortable and difficult. By contrast, using only System 1 to make decisions is effortless.

It is the very use of two-system thinking that behavioural economics seeks to make the most out of; encouraging people to use System 1 in decision-making by manipulating the parameters of the choice situation. As a result the whole process is made easier and feels more natural. This manipulation is known as choice architecture. Using this it is possible to make what would previously have been the rational choice appear to be the automatic instinctive choice.

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<sup>2</sup> Thaler, Richard & Sunstein, Cass, 'Nudge', Yale University Press, Yale, 2008, p.21

## What is Choice Architecture?

Understanding the role of choice architecture is fundamental to the successful utilization of behavioural economics; failing to appreciate the importance of the way choices are presented could result in people making the wrong decisions.

Therefore, it is very important that anyone who designs an environment in which people make decisions, such as a website or an application form, appreciate their function as architects of the choice situations. The idea is not for the choice architect to force people to change their minds but to alter the context of their decision-making so that they believe they have changed their minds of their own accord.

## Behavioural Economic Models and their Applications

The applicable models of behavioural economics come under two themes: heuristics (mental shortcuts or rules of thumb that we are inclined to use on a day to day basis in decision-making) and framing (the way choices are presented to us). The status-quo bias is potentially the most influential of these as it has an impact on several of the other models. This bias can be described as the overwhelming influence of a person's desire for a situation not to change, as we all have an in-built preference for the familiar. Therefore, we would rather avoid the possibility of something bad happening as a result of our decision than actively pursue any potential benefits that might be achieved, because the desire to avoid loss is far stronger than our desire for gain. This is known as loss aversion. Both the status-quo bias and loss aversion are extremely dominant forces in the decision-making process and must be taken into account when evaluating why a person has made a particular decision.

It is also important to recognize the role of inertia in both these models; many people make fewer decisions than they would like to because the effort is deemed too much. This can be seen in practice in the comparison between organ donor policies in different countries. In Spain you must actively 'opt-out' of the organ donation scheme otherwise it is presumed that you wish to be a donor. As a result, only the people who feel most strongly about the issue bother to opt out and so the Spanish healthcare system has much shorter donor waiting lists. By contrast, in the UK and America, people have to opt in; this results in far fewer people deciding to become donors and a resulting scarcity of organs.

Other models that fall under heuristics are the endowment effect, the gambler's fallacy, the self-serving bias and money illusion. The endowment effect can be described as how taking ownership of something increases its value in the eye of the owner. The gambler's fallacy is the incorrect assumption that all probabilities will even out over time. The self-serving bias is the tendency to only notice evidence that

### **An Academic Introduction to Behavioural Economics, Government and Digital Media**

supports one's case and conveniently ignore all other evidence, and money illusion is the tendency to focus on the nominal number value of something rather than its real economic value.

Understanding framing is key to being a successful choice architect. Whilst individuals must first overcome their own in-built cognitive biases, as described above, the external influences of framing also play a major role in the decision outcome because of the impact of choice presentation. Chunking is the technique of breaking unattractively large complex tasks down into several more appealing simpler ones. There is also the role of comparison in framing; if a person is presented with the previous actions of others in the same situation they are far more likely to make the same decision. The influence of social pressure as an incentive to act is corroborated in practice by Amazon's inclusion of an aggregated 'purchase intent' window on its pages showing you what others have done in your situation. Similarly, people living on a street in San Marcos, California who were shown their own electricity consumption in comparison to that of their neighbours on their bills were far more likely to alter their own usage, be it using less electricity or more, to come into line with the social norm.

## Can Behavioural Economics be applied both commercially and politically?

As part of a wider society, we are influencing and being influenced all the time. Therefore, many of us are already aware of how certain features such as incentives affect decisions; indeed the core processes behind advertising and marketing have so far been using behavioural economic techniques without giving a name to these ideas. Why these techniques work has now been quantified in the models of behavioural economics and given a structural framework that can be applied to any decision-making situation be it commercial, social or political. The brilliance behind this framework is that it is inextricably embedded in the practice and implementation of its ideas. It allows the choice architect to further maximise the impact of factors such as incentives and to better justify (and in business situations charge sufficiently for) ideas that have been generated.

The commercial significance of behavioural economics is far reaching in terms of its ability to affect changes in spending patterns or choice of brand. However, the current political relevance of this topic is clearly demonstrated by the invitation from David Cameron to Richard Thaler, author of 'Nudge', to come to Downing Street to work with his newly appointed 'behavioural insight team'. The popular general thinking within both the British and American governments and their wider public sectors is that the theories of behavioural economics can be harnessed and applied to social policy in order to achieve monetary savings and simultaneously encourage the general public to make beneficial changes in their lives. This is particularly relevant in a time of recession where modification of the economy and public services are essential. In using behavioural economics to implement these changes the state does not have to use the hard instruments of legislation and regulation, which are far more costly, time-consuming and interfering than gentle behavioural nudges.

Both Obama and Cameron appear to be following this idea of libertarian paternalism of integrating behavioural economics and nudge theory into a political stance. This is clearly an attempt to "resolve a classic Conservative dilemma"<sup>3</sup>: since the Conservatives believe in a small state and low taxation, there has always been the question of whether they should leave the general public to their own devices and accept any consequences or attempt to use the "levers of state to try and improve"<sup>4</sup> social behaviour. The role of the policy maker is now to "maximize the public good whilst also leaving as much choice in the hands of citizens as possible"<sup>5</sup> by 'nudging' them into behaving prudently. Popular opinion now held is that "rather than big, small or smart state we need it to protect, enable and empower citizens, balance national fairness with local flexibility and shape behaviour – but give citizens the freedom to determine their own future"<sup>6</sup>. This is in contrast to the public service legacy of an acceleration of centralisation left by New Labour. This was characterised by top-down initiatives combined with tough performance measures and became known as the 'command and control' approach to public services<sup>7</sup>, although state intervention in economic areas was intentionally limited in order to encourage free markets.

<sup>3</sup> McSmith, Andy, article: <http://www.independent.co.uk/news/uk/politics/first-obama-now-cameron-embraces-nudge-theory-2050127.html>

<sup>4</sup> Andy McSmith, *ibid*

<sup>5</sup> Institute for Government & the Cabinet Office, *MindSpace: Influencing behaviour through public policy, pdf file, 2010, p.73*

<sup>6</sup> [http://www.thegovmonitor.com/world\\_news/britain/blair-brown-and-the-new-labour-contribution-to-uk-politics-35291.html](http://www.thegovmonitor.com/world_news/britain/blair-brown-and-the-new-labour-contribution-to-uk-politics-35291.html)

<sup>7</sup> [http://www.thegovmonitor.com/world\\_news/britain/blair-brown-and-the-new-labour-contribution-to-uk-politics-35291.html](http://www.thegovmonitor.com/world_news/britain/blair-brown-and-the-new-labour-contribution-to-uk-politics-35291.html)

## The Impact on Digital

In addition to its influence on social policy and government, it is also important to recognise and harness the potential impact of behavioural economics on the digital world. The fundamentally visual aspect of this media means that recognising issues such as framing are more important than ever, especially as it has been empirically demonstrated how interface design and visual order can affect choice.<sup>8</sup> In order to construct a successful digital arena for what must now be understood as non-rational users, digital architects must pre-empt these users' fallible tendencies by providing the appropriate framework and options on their websites.

Additionally, the new social strength of the digital marketplace is not something that can be ignored. There has been a marked shift in power between the individual and the state as a result of the emergence and subsequent dominance of the Internet; it is now possible for an individual's comments or actions on the Internet to have resounding repercussions nationally or even internationally. Youtube.com is an apt example of this phenomenon; ordinary people have been propelled to international fame and notoriety simply by posting a clip of themselves or voicing their opinions. It is now important for both the government and the private sectors to be aware of this public capacity and, instead of feeling threatened by it, see it as a positive increase in greater personal autonomy. Along with this increase in personal autonomy comes increased accountability and increased social pressure. Individuals are becoming more visible to their peers through digital media such as social networking sites and so are becoming more aware of how other people behave. As a result, we are modifying our own behaviour accordingly, which means that the impact of peer pressure and social proof are becoming more apparent. This is something that can be capitalized on with the application of behavioural economics; by including positive testimonials from other users on your website you have the potential to positively influence new patrons through the use of comparison. An additional employment of this idea is to recruit respected authoritative opinion leaders as 'ambassadors' for your service or site, who can then serve to provide others with social proof of what you offer.<sup>9</sup> This is an example of exploiting the framing influence of social pressure and comparison.

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<sup>8</sup> Hull, Janet, 'Behavioural Economics: Red hot or red herring?', from MediaTel's Newslines, <http://mediatel.co.uk/newsline/2009/10/26/behavioural-economics-red-hot-or-red-herring/>

<sup>9</sup> Central Office of Information, 'Communications and Behaviour Change', 2009 report, p.24

## Information Architecture versus Behavioural Economics: coincidence or similarity?

In the context of digital, it is possible to draw many parallels between behavioural economics and something that has been inherent to quality web design for several years now: information architecture. Information architecture can be described as the categorisation of information into a coherent structure, preferably one that most people can understand quickly, if not inherently. It is by necessity that information architecture follows a comparable framework to behavioural economics; web design is constrained by the prescriptive nature of its technical environment and therefore has to be planned carefully. It is no coincidence then that the framework that behavioural economics represents is consistent with the procedures of information architecture. If you compare the construction of a website full of options and choices to the construction of a single behavioural economics choice situation it is clear that similar rules will apply. For example, it is vital to take into account issues of framing (even if they are not known by that label) when designing a website, because of the effect they will have on the structural design of shared information environments. Additionally, one of the prerequisites of a functioning website that involves user activity or interaction is that those users are steered into a specific course of action through precise information architecture influences; this is equivalent to the idea of influential nudging in behavioural economics.

On further investigation, even the Institute of Information Architecture's website contains an article in its blog Boxes and Arrows that allies information architecture with cognitive psychology: it maintains, "there is a good deal of common ground between the two disciplines" and argues that "both are concerned with mental processes and how to support those processes."<sup>10</sup> There is therefore the potential for the argument that much of the current behavioural economic thinking involves taking the best practices out of website design and information architecture and applying these ideas to non-digital situations. Certainly this may be true given the number of parallels that can be drawn between the two disciplines. However, Jason Withrow makes the distinction between cognitive psychology's focus on "theory and research, while the field of information architecture has tended more toward the practitioner side"<sup>11</sup>. Furthermore, the techniques formally laid out in the behavioural economics framework may not have been solely sourced from information architecture; similar approaches have also been used for years in fields such as marketing and advertising.

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<sup>10</sup> Jason Withrow [http://www.boxesandarrows.com/view/cognitive\\_psychology\\_ia\\_from\\_theory\\_to\\_practice](http://www.boxesandarrows.com/view/cognitive_psychology_ia_from_theory_to_practice)

<sup>11</sup> Jason Withrow, *ibid*

## The IPA lives and breathes Behavioural Economics

Many of the bigger digital advertising agencies have new behavioural economic sections on their websites that promote the application of behavioural economics to their specific fields (see [thegrandunion.com](http://thegrandunion.com) as an example).<sup>12</sup> Additionally, the new president for the Institute of Practitioners in Advertising (IPA), Rory Sutherland, has pledged to use his two-year term to broaden awareness on this topic. He believes that it “gives [advertisers] a framework that will refresh [their] thinking and [their] talent pool and with it [they] can use ideas to turn human understanding into business and social advantage”. A mini site for behavioural economics has been created within the IPA website that is designed to promote understanding and be a directory of information for the subject in relation to advertising, including links to relevant academic papers and case studies. Janet Hull, the consultant head of marketing at the IPA, states in her article ‘Behavioural Economics: Red Hot or Red Herring?’ in a recent edition of MediaTel that “the IPA will be immersing its members in behavioural economics theory and practice through seminars and workshops. In the first half of next year it will be moving into training and development. The IPA is committed to leading industry research and development in this area.”<sup>13</sup> This significant industry involvement is similar to the importance being placed on this area by the government and demonstrates how aware the wider population is becoming of the potential uses of behavioural economics and its application to business situations.

## Is there such a thing as too much influence?

Whilst there is much current enthusiasm for behavioural economics we must remember ultimately that this is one (albeit very applicable) theory and so we must not allow ourselves to become restrictively focused on its application as this might adversely blinker our understanding of choices and decision-making. Additionally, we must not underestimate the power of influence itself. There is a real potential for every future situation we face to lose its neutrality as we become more aware of the capacity of choice architecture. As behavioural economics “embodies a line of thinking that moves from the autonomous individual making rational decisions to a ‘situated’ decision-maker, whose behaviour is automatic and influenced by their choice environment”<sup>14</sup>, it is important to ask who gets to decide on this choice environment. It is essential that the general public understands or at least appreciates the impact of behavioural economics before it can be appropriate for policy makers to impose behaviour-influencing strategies on them. Otherwise there is definite concern over the potential for manipulation, perhaps even ‘brainwashing’ and certainly the loss of public freedom of opinion and action. There must be rigorous evaluation of behavioural approaches as they are applied more widely, our knowledge must be systematically built and the results of the application of behavioural economics should be made available for the general public to debate and adopt as they see fit.<sup>15</sup>

<sup>12</sup> <http://www.thegrandunion.com/blog/2009/12/how-a-nudge-can-change-the-world/>

<sup>13</sup> Hull, Janet, ‘Behavioural Economics: Red hot or red herring?’, from *MediaTel’s Newslines*, <http://mediatel.co.uk/newslines/2009/10/26/behavioural-economics-red-hot-or-red-herring/>

<sup>14</sup> *Institute for Government & the Cabinet Office, Mindspace: Influencing behaviour through public policy, pdf file, 2010, p.73-4*

<sup>15</sup> *Institute for Government & the Cabinet Office, Mindspace: Influencing behaviour through public policy, pdf file, 2010, p.78*

## Conclusion

The application of behavioural economics to both governmental and digital matters is very relevant as it offers a potentially powerful set of tools to policy makers and digital architects alike. Behavioural science “will continue to turn previously invisible influences into explicit choices”<sup>16</sup> whilst the low cost nature of nudging as opposed to outright legislation is a very attractive option for government with the necessity for fiscal restraint in today’s economic climate.

For the digital communication world, behavioural economics gives validation to already practised principles and reduces concerns over the effectiveness of spending on things like marketing, which might previously have been thought of as expensive and unpredictable, but can now be proven to have a direct influence on people’s decision-making. However, for behavioural economics to become a revolutionary program of research that is consistently applied to fields such as government policy and the digital world, rather than a passing episode of thought, it must become more open-minded and much more critical of itself.<sup>17</sup> Nonetheless, the commercial, social and digital implications are undeniably advantageous and its current prevalence is justified, particularly in relation to cost-saving nudging options in government policy and the framing of digital media.

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<sup>16</sup> *Institute for Government & the Cabinet Office, Mindspace: Influencing behaviour through public policy, pdf file, 2010, p.73*

<sup>17</sup> *Rubinstein, Ariel, 'Discussion of 'Behavioural Economics' by Camerer, Collin', in 'Advances in Economics and Econometrics: Theory and Applications', Ninth World Congress, New York, 2005*