

## **The limits to libertarian paternalism: two new critiques and seven best practice imperatives.**

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### **Abstract**

*Behavioural economists argue that humans are predictably irrational in various ways, as a result of which there appears to be a role for public policy in improving their decision-making. We offer a sympathetic critique of this so-called 'libertarian paternalist' approach. As well as reviewing existing critiques, we present two new arguments. First, we question whether policies which are not beneficial to the individuals they target can be justified within a libertarian paternalist framework, even if they contribute to the social good. Second, we highlight the potentially adverse consequences of poorly targeted libertarian paternalist interventions. The penultimate section brings together the existing critiques and the new arguments to offer seven best practice imperatives for the careful application of these powerful, but easily misused, tools of government. We conclude with a brief reflection on what freedom might mean in the context of libertarian paternalist governance.*

### **1. Introduction**

The liberal consensus in most Western democracies has rendered strong forms of governmental paternalism, which limit the choices available to individuals, politically inadmissible in many areas of life. Where individual liberty is curtailed, opponents can point to a body of political philosophy and economic theory which suggests that citizens should be allowed to conduct themselves freely. However, the rise of behavioural economics has enabled economists to identify common flaws in the reasoning and judgement of ordinary people. They interpret these flaws not as the erroneous exercise of liberty (from whatever normative perspective), but as barriers to liberty as they see it, which entails full and informed choice free from bias and other confounding influences. There therefore seems to be a legitimate role for liberal governments in helping people to choose better. Although government advertising and the use of psychological insights in government policy both have a long history, some forms of government that were once off limits for political liberals are now coming to seem more justifiable. Sunstein articulates the claim succinctly: 'An approach is both libertarian and paternalistic if it retains freedom of choice while also leading people to make decisions that will improve their well-being' (2006, p256).

Our aim in this paper is neither to advocate nor to criticise libertarian paternalism *per se*. We think it is self-evidently appropriate in some manifestations, but deeply problematic in others. The important debates are now more nuanced, concerning when, where, and how libertarian paternalist techniques should be used. In order to address these more nuanced questions, we will need to explore the gap between the relatively narrow terms in which libertarian paternalism has been justified intellectually, and the much broader sphere in which the techniques of government associated with it are coming to

be applied. We begin by briefly situating libertarian paternalism in its intellectual and historical context. We then review existing critiques of it, before adding two critiques of our own. Our critiques highlight firstly the difficulties of justifying libertarian paternalist techniques being applied for socially rather than individually defined ends, and secondly the harm those techniques can do to those who are not their intended targets. Combining the pre-existing critiques with our own, we then set out seven imperatives as an aide-memoire of best practice for those who evaluate potential libertarian paternalist policies. The seven imperatives are: clarify and justify the ends pursued; explore how citizens might be right; question notions of what is good; respect those not targeted; treat rationality only as a means; avoid deception; and maintain individuals' self-reliance. In the context of the paper, we hope that these imperatives will seem like common sense. Nonetheless, we think it is important to flesh them out, because our review of libertarian paternalist interventions suggests that they are not always well observed on the ground.

Intellectual history is replete with theories that are far more sophisticated in their original inception than in their practical application (Karl Marx's and Adam Smith's offer just two examples). To avoid a similar outcome in this emerging field, where even the canonical texts are not always clear on fundamental issues, both clarity about first principles and rigour in their translation into practice are needed. We illustrate our argument with concrete examples throughout, and conclude by reflecting briefly on what freedom might mean in the context of libertarian paternalist governance.

## **2. Libertarian Paternalism in Context**

Drawing on experimental psychology, behavioural economists have identified a series of obstacles that make it difficult for human beings to exercise choice in ways that would best serve their own interests (see e.g. Kahneman, Knetsch, and Thaler, 1991; Kahneman and Tversky, 1979). Limited information, time and cognitive ability mean that people do not evaluate options perfectly. They also tend to discount the future more than perhaps they should (Thaler and Benartzi, 2004) and exhibit systematic cognitive error, as illustrated by the impact that default-setting or the ordering of options can have over behaviour (Camerer *et al*, 2003; Thaler and Sunstein, 2003). Moreover, individuals do not like to make choices at all, meaning that they tend to stick with default options in a range of contexts rather than adopting other options that require positive action in order to be selected (Thaler and Sunstein, 2009, pp37-39). These and other flaws in individuals' choice-making have been painstakingly catalogued and labelled by behavioural economists, who use terms such as 'projection biases' and 'nostalgic biases' (Camerer, 2006); 'myopia', 'procrastination', 'optimism bias' and 'miswanting' (Sunstein, 2006); and 'hyperbolic discounting' (Thaler and Benartzi, 2004, citing Ainslie, 1975).

Each of these behavioural maladies can be addressed by specific policy actions, from providing vivid narratives of possible harm which warn against 'irrational' optimism (Sunstein, 2006, p258), to framing the choices that individuals make in such a way as to encourage them to choose welfare enhancing options, to selective default setting, providing information, and aiding in calculations. Jones *et al* (2011) identify four general mechanisms through which libertarian paternalist goals are achieved - spatial design, temporal ordering, measures to rationalize the brain, and prompting social norms - and describe the use of each in a variety of contexts. Behavioural economists are able to point to a series of benefits

of such policies: strategic default setting, for instance, can improve the provisions made for old age without making such provisions mandatory, and leads to increased organ donation in countries where individuals must opt out rather than opt in (Johnson and Goldstein, 2003). Choices with respect to such matters have to be ordered somehow, and defaults have to be set somewhere, so why not seek to ameliorate the negative impact of factors known to influence human decision-making in any case? Beginning from such paradigm cases, libertarian paternalists have expanded their purview to consider other instances in which policy might guide people to act in their own best interests without removing the freedom to choose.

Libertarian paternalism can be seen as a contemporary twist on the long-standing general dilemma for liberal government of how to induce appropriate conduct among free subjects (Burchell, 1996). Scholars of government have shown how various forms of liberalism have sought to achieve this objective for over two centuries (Peck and Tickell, 2002; Foucault, 1977; Harvey, 2007). In this historical perspective, libertarian paternalism represents 'not necessarily unprecedented re-formulations of relations between state power, civil society and private life, but ... particular manifestations of liberal government in the present' (Pykett *et al*, 2011, p304). In the contemporary British context, while libertarian paternalism has been associated with the current Conservative government, it also has precedents in the previous Labour administration and earlier (e.g. Halpern *et al*, 2004; for discussion see Jones *et al*, 2011).

More broadly, libertarian paternalism can trace its intellectual evolution to a range of psychological and behavioural theories. According to Pykett (2012), who discusses the gendered nature of the development of libertarian paternalism, these include:

'Pavlov (1927) and Skinner's (1953) early work on stimulus response and conditioning, Cialdini's (2007 [1984]) work on influence, Tversky and Kahneman's (1974) account of heuristics, or "rules of thumb", Prochaska and DiClemente's (1983) theories of the different stages of behaviour change, Bandura's (1986) focus on self-efficacy, behavioural contracting and goals, and work on community and interpersonal behaviours from social theorists including Bourdieu (1986), Coleman (1988) and Putnam (1995)' (Pykett, 2012, p219).

The spread of libertarian paternalist interventions also resembles that of neo-liberal policies and approaches: Pykett lists 'the New Deal, exercise promotion, anti-smoking, patient compacts, presumed consent for organ donation, acceptable behaviour contracts, tenants agreements, homeschool agreements and parenting programmes' as just a small selection of recent examples (Pykett, 2012, p218; on the breadth of neo-liberalism's intellectual and geographical reach see Barnett, 2009; Larner and Walters, 2004; Peck and Tickell, 2002; Peet, 2007).

### **3. Existing Critiques of Libertarian Paternalism**

Libertarian paternalism has many critics, and for simplicity we group their critiques here under six themes: normality; rationality; human development; choice; individualism; and private interests. Critics have also questioned whether governments can be trusted to implement libertarian paternalist policies

appropriately. We omit this critique here because it is discussed in the next section, as a foundation of our own critique of libertarian paternalist interventions for the social good.

First, deference to psychological and psychiatric definitions of what is normal and abnormal, particularly when such definitions are in the interests of authorities, elites and ruling factions, has long been controversial (e.g. Goffman, 1961; Rose, 1996; 1999). Behavioural economics, however, goes further by showing how the decisions of most people are, in many situations, demonstrably in error. This is a disturbing claim because it presumes that whatever authority or cadre of experts makes this judgement is capable of identifying all of the factors relevant to individual decision-making, and should be trusted to do so even when most people find themselves disagreeing with the conclusions drawn. Judgments of error can thus seem immune to non-expert criticism.

Second, increasing the alignment of individuals' behaviour with accepted norms of rationality has been criticized as a policy objective. Berg and Gigerenzer (2010) argue that although behavioural economists have amassed a wealth of evidence to show that individuals deviate from the norms of neoclassical economics, they have 'produced almost no evidence that deviations are correlated with lower earnings, lower happiness, impaired health, inaccurate beliefs, or shorter lives' (p133). Seeking to de-bias individuals' decision-making with reference to an idealised form of rational choice may not, therefore, always help those individuals to achieve their ends.

In such discussions, we would also caution that it can be difficult to disentangle rationality as a means of achieving ends from the ends themselves. An end such as greater public health seems uncontroversial, for instance, but even pursuing this end can presume positions about the extent to which gratification should be deferred, and mind and body disciplined. Such positions may be well-considered, but if they are presumed to embody rationality then their normative dimensions are obscured (see our fifth best practice imperative in section six below).

Third, the freedom to take risks and make mistakes is important to the development of individuals' capacities to choose well. There may be a substitution effect between independent individual thought and libertarian paternalist policies that effectively do people's thinking for them (John *et al*, 2009; see also Green, 1983; Klick and Mitchell 2006, p1623). Thaler and Sunstein reply by arguing for the educative value of libertarian paternalist information campaigns (2009, pp240-241). Whilst they are clearly right in some cases, the reply only holds with respect to unbiased, explicit and unsensationalised government advice. Learning which choice is best in a series of specific contexts is, moreover, not the same as developing a generalised practical skill in choosing well.

Fourth, libertarian paternalism's aim of facilitating individual choice is not straightforward in practice, because real-life human choices are often contradictory or opaque. A drug addict's first-order desire for drugs, for example, may contradict her second-order desire not to desire them (Crossley, 1999). The relative priority of these desires may also vary at different times or under different circumstances, so determining which desire is most authentic is extremely difficult (see also VanDevender, 2008). In such

cases, how could a libertarian paternalist policy-maker decide which of the addict's desires they should assist her in satisfying?

In an earlier paper, Sunstein argues that government has a role in preventing the development of welfare-reducing preferences as exemplified by addiction (1991, pp25-26). More broadly, he recognises that preferences, desires and beliefs are moulded by social and cultural circumstances and suggests that if preferences arise from an unjust status quo, governments that facilitate the apparently free pursuit of those preferences may be acquiescing to the injustice that produced them. Sunstein uses this insight to build the case that a democracy 'should be free and is perhaps obliged to override private preferences' in a wide variety of circumstances (1991, p6). Thus it is not straightforward to determine how a liberal government should further freedom of choice, particularly when the ways in which people exercise choice are constrained and distorted.

Fifth, since apparent failures in individuals' reasoning are not always caused at the individual level, an individual-centred solution may not always be appropriate. Over-eating, for example, could be interpreted as the individual over-valuing present consumption, thereby inviting libertarian paternalist policies that seek to correct this bias, such as warnings about the health problems associated with obesity. However, this interpretation overlooks contextual factors such as socio-economic status, the physical design of built environments, socio-cultural norms, and the costs, laws, policies, attitudes and values associated with food in particular localities. Insofar as these factors are decisive, policy may be more fruitfully directed towards them than towards individuals. Techniques aimed at individuals may still be effective, but they are more likely to be effective if they at least take contextual factors into account (Le Grand, 2008; Swinburn and Egger, 2002; Butland *et al*, 2007; Lake and Townshend, 2006).

Strauss (2009) makes a similar critique of libertarian paternalism from a geographical perspective. She is concerned that whilst economic geography has gone beyond individual behaviour towards approaches that give more attention to context, culture and locality, behavioural economics has not followed suit: 'The importance of context and the role of culture are tangentially acknowledged but never elaborated' (p303). Whilst recognizing that behavioural economists have made 'great strides' in undermining strong claims to universal economic rationality, she nevertheless suggests that they have been constrained by their methodological individualism (relying upon an experimental approach to cognition, which attempts to isolate individuals), and therefore that 'behavioural economists have failed to fundamentally challenge the ontological foundation of *homo economicus*' (2009, p303). She draws attention to a range of non-cognitive influences over action and settles on the metaphor of a pair of scissors for describing how environment and cognition come together in the decision-making moment (Strauss, 2009, p304 citing Simon, 1956). This duality between context and cognition implies that context should not only be taken into account as an influence over cognition, but recognised as a parallel direct influence over action.

Sixth, libertarian paternalist techniques may be particularly problematic when they are employed by private interests. According to Thaler and Sunstein (2009) too much choice can debilitate consumers, leading to indecision and falling demand. For-profit companies have capitalised on this behavioural

insight, from the colour-coding of Tropicana's extra fruit-juice varieties in order to curb consumer confusion, to reductions in the number of Head and Shoulders products from 26 to 15 (as a result of which profitability increased), to premium restaurants offering no choice at all (*The Economist*, 2010). Such interventions may be in consumers' interests, or they may not. The gambling industry, for instance, which has long exploited gamblers' over-optimistic valuations of the possibility of future gains, offers an example which seems less likely to enhance customers' well-being. More broadly, *The Economist* notes how simplifying consumers' choices works in favour of big brands: companies which spend significantly on marketing and legal advice to protect or reinvent brands can be interpreted as 'exploiting customers' aversion to choice' (*The Economist*, 2010).

The above critiques are important, and inform our thinking as to how, where, when and to whom libertarian paternalist policies should be applied. However before drawing general conclusions we need to add our two complementary critiques, concerning firstly the difficulty of justifying libertarian paternalist techniques being applied for socially rather than individually defined ends, and secondly the harm those techniques can do to those who are not their intended targets.

#### **4. Socially-Driven Libertarian Paternalism**

We might define two types of libertarian paternalism. The first type involves strategically nudging individuals in the service of those individuals themselves. Call this individually-driven libertarian paternalism. This is what libertarian paternalists claim to be advocating in policy terms. Sunstein's definition quoted in our opening paragraph, for instance, encompasses the possibility that individuals might be wrong about what will promote their own well-being, even when they think carefully about it: a policy might promote individuals' well-being by contradicting their apparent preferences.<sup>i</sup> Nonetheless, libertarian paternalism so defined aims to further individual rather than social interests. Insofar as the furtherance of individual interests also serves society (and under a liberal framework this synergy is frequently assumed), there generally arises no great debate about the aims of the libertarian paternalist project. Yet outside a liberal framework one might ask how different libertarian paternalism would look if Sunstein's definition ended not with 'their well-being' but with 'the well-being of such-and-such an authority' or 'the well-being of society conceived in such-and-such a way'. We will call this second formulation socially-driven libertarian paternalism.<sup>ii</sup> There is considerable slippage between individually-driven and socially-driven libertarian paternalism in practice, and the significance of this slippage has not been fully appreciated.

It can be hard to distinguish between social and individual goods. Individual goods, for example, might be seen to include social goods, since it is good for an individual to live in a good society. Nonetheless,

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<sup>i</sup> Thaler and Sunstein nuance this by explaining that well-being is ultimately to be judged by individuals, but under idealised conditions of perfect knowledge, decision-making capacity and self-control (2009, pp5-6). Given the distance between these conditions and reality, this important orienting principle could become somewhat hypothetical in practice.

<sup>ii</sup> We focus on the distinction between individually-driven and socially-driven libertarian paternalism because the claim to social benefit is prevalent, but much of our critique of socially-driven libertarian paternalism would apply to any form of libertarian paternalism that was not individually-driven.

what is good for society is not always good for the individual. Individuals tend to want to consume more resources than is socially optimal, for example, meaning that socially-driven government interventions will tend to be more conservative, in the literal sense, than interventions which seek to enact individuals' preferences. The inadequacy of viewing collective interests merely as an aggregation of individual interests is evident across many policy areas. Within environmental studies, for example, the gap between high-tier government intentions and the actual implementation of policies on the ground arises precisely due to the difficulty of reconciling state, regional and personal interests with the collective interests of the international community (Jordan, 1999). Within studies of the local public sector, the competition between sub-national governments and national governments for control over scarce fiscal resources reflects the dichotomy between the collective interests of nations and smaller individual units of administration (Rodríguez-Pose and Gill, 2003). Within urban policy, the re-design of cities according to principles of liberalisation and privatisation reflects a particular response to the challenge of reconciling city-wide and individual interests that, once again, does not and cannot please everyone (Lawless, 1991).

Government, then, routinely has to reconcile divergent individual and collective interests. Libertarian paternalists could seek to side-step this challenge by intervening only on behalf of individuals rather than society (although this might leave them with a very restricted scope). Yet social considerations are present even within the canonical libertarian paternalist texts. For example, whilst Thaler and Sunstein's book *Nudge* (2009) defines libertarian paternalism as 'try[ing] to influence people's behaviour in order to make *their* lives longer, healthier, and better' and 'to steer people's choices in direction that will improve *their* lives' so as to 'make *choosers* better off' (p5, italics added), an entire section of their book, entitled 'society', is devoted to explaining how libertarian paternalism can be used to serve social, and not necessarily individual, ends (pp167-224). In some cases, the section proposes making it easier for people to make altruistic decisions they would themselves choose to make under ideal conditions (e.g. regarding organ donation), but in others it seeks to encourage socially beneficial behaviour by making alternative actions more costly (e.g. reducing pollution). In a different section the authors also suggest 'social nudges' to conserve energy on grounds of 'national security, economic growth and environmental protection' (p75). The libertarian paternalist agenda thus seems to overstep its conceptual bounds, with the difficulty of reconciling individual and social interests glossed over.

We are not claiming that Thaler and Sunstein advocate socially-driven policies by mistake. In his earlier paper, Sunstein explicitly argues that the social good offers legitimate grounds for influencing preferences (1991, p11; see also Thaler and Sunstein, 2009, pp241-242). However, a clear justification for this position needs to be kept in mind if such influence is to be appropriately bounded, as is illustrated by the encouragement of environmentally-friendly behaviour. Such encouragement might take the form of publicising firms' and individuals' energy consumption, creating social pressure on the worst offenders and a degree of friendly competition to be more environmentally benign (Thaler and Sunstein, 2009, pp74-75, pp200-210). Alternatively, it might involve supplying green energy to households unless they objected, with the expectation that many would not change their existing supplier, thereby becoming green by default whilst still maintaining the option to choose (Pichert and

Katsikopoulos, 2008). Alternatively again, there are various eco-friendly domestic design options, including setting washing machines to run green, low energy washes by default (Lockton *et al*, 2008).

In these examples, rather than seeking to enhance the targeted individuals' welfare, the proposed policies exploit flaws in their decision-making to achieve socially beneficial outcomes which may not benefit the individuals themselves. Indeed, the interests of individuals can just seem like a constraint over the degree to which they can be nudged in a socially beneficial direction. Pichert and Katsikopoulos, for instance, discuss how customers' propensity to react to price differentials that are very large, or to the perception that something is being foisted on them, limits the effectiveness of default-setting. Although these authors advocate a sensitive approach and are aware of the risk of being 'accused of paternalistic manipulation' (2008, p71), we would nonetheless be concerned that this line of argument could render governing individuals a matter of stealth, whereby psychological techniques are used to encourage behaviours which are not in individuals' self-interest as far as is possible without resistance. Presumably an optimal monetary difference between the price of green and non-green electricity could be calculated, which would maximize the extent to which customers' cognitive biases and flaws could be exploited before provoking a backlash (arguably, such a game of brinkmanship has been ongoing with respect to petrol prices in the UK in recent years). But is this really the goal policymakers should pursue?

The picture becomes yet more complex when we recognise that diversity in individual behaviour may be in society's interests. Irrational individuals may survive catastrophes, for instance, when unexpected system-wide shocks occur (Berg and Gigerenzer, 2007, p4). But would it be fair to encourage some individuals to act in ways that are not in their self-interest in order to increase the resilience of society? The slippage between individually- and socially-driven libertarian paternalism obscures such questions.

We have shown that exploiting flaws in individuals' decision-making for social ends deviates from the original intention of libertarian paternalism and indeed from the very definition of libertarian paternalism offered by its advocates. Thaler and Sunstein go some way towards anticipating this critique by recognising the possibility of both 'evil' nudgers and 'incompetent' nudgers (2009, pp238-240, p248). State officials might be captured by private interests, they might be corrupt and nudge according to their own agendas, or they might be incompetent in their nudging. These are important risks, but they do not exhaust the reasons why governments, benevolently or otherwise, might nudge in ways that do not benefit individual citizens. If governments have less incentive to identify and correct their own errors than do individuals (Glaeser, 2006) this may make them intrinsically more likely to be persistently incompetent nudgers. Even in the absence of self-interested or incompetent behaviour, the state may still further certain group interests over others. Institutions of government, such as the judiciary, central departments, and regional and local bodies, reflect a particular consensus between social factions developed over time (Jessop, 1990; Poulantzas, 1973). Insofar as they fail to examine the in-built tendencies and biases of the state apparatus, Thaler and Sunstein (2009) appear to employ a relatively straightforward, pluralist view of the state, which has been widely critiqued among state-theoretic scholars. For pluralists, 'policy outcomes simply reflect the balance of forces in society registered (but in no way mediated) by the governing authorities' (Pierson, 2004, p58). Pluralists thus characterised



believe that government policy should reflect the outcome of negotiation between different interests within society, but give relatively little consideration to the different abilities of competing interests to form interest groups and to gain influence over democratic states. Such a view overlooks the non-neutrality of the state that can result not just from evil or incompetent state personnel, but from different social groups having systematically privileged access to states, and from certain agencies, or indeed entire governments, being captured by social factions.

Whilst in many cases the happy synergy between individuals' and society's interests often assumed by liberals does seem evident, we are concerned that the possibility of these interests being in conflict tends to be under-explored by libertarian paternalists. The omission is significant because libertarian paternalism is justified in terms of the improvement of individuals' capacities to freely further their own ends. Policies that are not in individuals' interests should not be either explicitly or implicitly justified on the basis that they are. Libertarian paternalists could respond to our critique by confining their political project to interventions which assist individuals in furthering their own interests. Alternatively, they could abandon their individually-oriented definition of libertarian paternalism in favour of some more general, or social, orientation, but they would then need to clarify the wider implications of doing so. This in turn, we suspect, would raise questions about the political implications of libertarian paternalists' policy proposals which are currently obscured by the presumption of synergy between social and individual benefits in the libertarian paternalist literature. Without such clarity, there is a risk that policies will be designed for the improvement of society (however understood), but only justified by association with a narrower project of improving individuals' decision-making.

## **5. Symmetric Libertarian Paternalism**

Our second argument concerns the costs that libertarian paternalist policies impose upon those who do not benefit from being nudged, steered or otherwise influenced. Advocates of libertarian paternalism have also argued for 'asymmetric paternalism', meaning that libertarian paternalist policies should seek to avoid imposing significant costs on those who are already acting rationally. They give the example of default-setting: if rational people would choose the default, then the default has no effect on them, but still steers less rational people towards a welfare-enhancing position (Camerer *et al*, 2003, p1219). Other examples might include putting healthier options at the front of school cafeteria counters (Thaler and Sunstein, 2009, p1). This subtle means of promoting healthy eating could be seen as asymmetric in its impact insofar as there is very little downside cost to healthy eaters of eating more healthily still.

Whilst we agree that libertarian paternalist techniques should aim to be asymmetrical in their impact, we nonetheless argue in this section that the difficulty of effectively targeting many such techniques has escaped widespread attention. In particular, psychological techniques that seem so effective in reigning in overly exuberant behaviours may be equally effective in encouraging previously rational individuals to adopt overly pessimistic views or to behave in overly cautious ways.<sup>iii</sup> It should be of particular concern

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<sup>iii</sup> This line of critique necessitates taking on some of the terminology of behavioural economics, with the risk that some underlying assumptions might be unintentionally reinforced. We are aware, for example, of the assumptions that must be provisionally accepted in order to apply notions like 'rationality', such as supposing that 'rational'

to libertarians that those who carry the burden of poorly targeted policies may not be those whose decisions are improved by them.

Perhaps the clearest example of symmetric libertarian paternalist policies is the mass communication of warnings which include 'vivid narratives of possible harm' (Sunstein, 2006, p258). Many people are not fully aware of the likely consequences of their actions, and so do not accurately calculate risks or weigh future risks against present gains. However such warnings can promote sub-optimal behaviour in situations where over-cautiousness and over-exuberance are both harmful. Consider, for instance, campaigns that aim to slow drivers down by showing them pictures of dead children with broken limbs (Department for Transport, 2010). Such campaigns could not only slow fast drivers down, but also make slow drivers slower and more cautious. Although accidents at speed cause more fatalities, there is considerable evidence linking slowness and over-caution with road accidents (Lave, 1985; Tignor and Warren, 1990; Harkey, Robertson, and Davis, 1990; Horberry *et al*, 2004; de Waard *et al*, 2009). Increasing anxiety in an untargeted way therefore seems a questionable means of promoting road safety.

Cumulatively, public awareness campaigns confront the ordinary citizen with an array of worst-case scenarios. Previously well-adjusted individuals may thus be encouraged at least to anticipate, and in some cases to expect, the worst in areas as diverse as home security, personal finance, health and consumption decisions, driving and sexual activity. In the extreme, increasing anxiety levels might lead to psychologically disordered behaviour just as 'irrational' as that which libertarian paternalist policies seek to address. For example, some public health campaigns illustrate the dangers of over-eating with graphic images: New York's public health campaign 'Are you pouring on the pounds?' featured a glass of thick yellow human fat marbled with blood vessels (British Broadcasting Corporation, 2009). Yet there is also a problem of anorexia in advanced Western economies, particularly among teenage girls. A survey of over 13,000 adolescents in America found that 25.1% of normal weight female adolescents (and 8% of normal weight males) perceive themselves as overweight (Perrin *et al*, 2010). This group may therefore wrongly deduce that the injunction to eat less is intended for them.

Advertising strategies have become more geographically targeted in recent years, and some major public awareness campaigns are increasingly sophisticated in tailoring their message. The UK's *Change4Life* campaign, for example, which aims to foster healthy individual lifestyles, has a number of local features, including local partners, search functions that allow internet users to isolate their local sports clubs, and a variety of 'case studies' that emphasise the local (Change4Life, 2011). However the newsletters are nationally focused, and the website, the logo and the majority of the television advertising are nationally uniform. Given that even local areas will include a variety of people with

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citizens exist and that rationality can be abstracted from affective and environmental influences over behaviour (see Elster, 1989; 2009). However we are engaged here in what might be called an *internalist* critique that pays attention to '...how well authors achieve the goals they set for themselves. ... An internalist critique gives due respect to the author and the ... norms of the scholarship within which the [argument] is situated' (Barnes *et al*, 2004, p8), and is distinct from an externalist critique that rejects an author's starting point, assumptions and arguments outright.

different susceptibilities to advertising messages, such efforts at targeting fall far short of sparing under-eaters, over-exercisers and the generally anxious from the injunctions of the campaign. The campaign's local colour aims more to maximise its persuasive impact than to isolate the appropriate target group.

In some situations, publishing targets can influence people in the opposite direction to that intended, as those who were previously out-performing the target feel entitled to perform less well. For example, making average household energy consumption public knowledge can signal to households which were previously consuming less energy than the average that they have licence to consume more (Schultz *et al*, 2007). Although careful crafting of public messages can limit this 'boomerang' effect, such crafting relies upon not letting high-performing parties know that they are performing well: 'do not, by any means, let them know that their current actions are better than the social norm' (Thaler and Sunstein 2009, p74). Stealth of this kind in the application of libertarian paternalist policies seems to contradict the publicity principle that Thaler and Sunstein themselves espouse later in the same volume (pp244-246; and see our sixth best practice imperative below).

Having now looked at several examples, the tacit, mistaken assumption of symmetric libertarian paternalist policies seems to be that rational individuals are not only rational, but also know with conviction that they are rational, and are therefore immune from psychological techniques aimed at others. Generalising broadly, we can therefore identify two risks that might be associated with symmetric libertarian paternalism: the risk of mis-correction, and the risk of anxiety.

First, if libertarian paternalist techniques are applied uniformly (and it is difficult to see how they would not be to a significant extent in cases such as public campaigning), some people – perhaps most people – may be encouraged to cease acting rationally as they mis-correct in response to the hazards they are presented with. This situation appears more likely if over-exuberant behaviour is more visible than over-caution, in which case the benefits of a symmetric libertarian paternalist policy that promoted caution would be more evident than its costs. In cases such as over-eating and driving too quickly, the visible consequences of over-exuberant activity may obscure the relatively more understated, yet potentially just as harmful, consequences of over-cautious behaviour such as under-eating and dangerously slow driving.

Second, even if the behaviour of previously rational individuals is not altered in relation to the specific issue addressed by a symmetric libertarian paternalist policy, there may still be an increase in the latent level of stress and anxiety experienced by those individuals. A number of scholars have already identified rising levels of anxiety and fear as one of the defining features of modern society (Furedi, 2002; Pain and Smith, 2008). With the United States economy alone already estimated to lose over \$40 billion per year due to reduced productivity and absenteeism associated with stress, at an estimated cost to each individual sufferer of over \$1500 per year (Greenberg *et al*, 1999), policies that responsabilise the consumer-citizen, albeit through a discourse of informing, enabling and liberating, may contribute to mental health pressures. Moreover, those harmed in this way are likely to be those who did not need the policies in the first place: if there is an anxiety burden produced by poorly

targeted policies, this burden will tend to fall disproportionately upon those most susceptible to anxiety, whom we might reasonably assume already behave cautiously (see Svihra and Katzman, 2004).

Not all libertarian paternalist policies involve vivid illustrations of possible harm and indeed the majority rely on subtler techniques of de-biasing. There is no reason to assume, however, that subtler psychological techniques cause less mis-correction than more sensationalist ones. If they are effective in bringing about changes of behaviour in the target population, then they may also be effective in changing the behaviour of those not targeted. Nonetheless, our argument should be qualified with reference to the specific type of psychological correction technique being used, because it may be easier to target some techniques than others.

Where the negative consequences of symmetry are known but considered acceptable, symmetric policies can be thought of as a type of socially-driven libertarian paternalism. For instance, one might argue that a public information campaign warning against some form of over-exuberance would generate a net benefit to society despite the mis-correction and anxiety provoked in a few previously rational individuals. As set out in the previous section, however, a more sophisticated justification is required for such interventions than a simple argument that the costs to A are lower than the benefits to B. The relevant questions are qualitative (when is it appropriate to influence A's choices in the interests of B?) as well as quantitative (by how much must B benefit, relative to A's detriment, to justify such influence?). A quantitative comparison may be impossible, moreover, insofar as the costs to A are either invisible or incommensurable with the benefits to B.

## **6. Seven best practice imperatives**

This section sets out seven simplified imperatives which can act as an aide-memoire for evaluating libertarian paternalist policies. The imperatives draw on both the existing critiques of libertarian paternalism discussed in section 3, and the new critiques levied in sections 4 and 5. We do not intend to rule out libertarian paternalist policies *per se*, but to facilitate clarity around their objectives and implications. We focus on issues more or less specific to libertarian paternalist policies, and therefore assume for instance that, as would be appropriate with respect to any policy proposals, a realistic assessment is made of the motivations and competence of those who would implement them. We hope the imperatives will be useful to academics evaluating potential policy proposals, as well as to those involved in implementation.

*One: Clarify and justify the ends pursued.*

In order to justify a libertarian paternalist policy, it is first necessary to clarify the ends to which it is a means. Is the policy individually-driven or socially-driven? Or is a libertarian paternalist technique being applied in the service of some other end, such as the profitability of a manufacturer? As we have seen, the justification for using libertarian paternalist techniques depends on the end in view, and in particular it is more difficult to justify socially-driven than individually-driven libertarian paternalism.

One might imagine a continuum of possible ends for libertarian paternalist policies. At one end of the continuum would be the reversal of pre-existing, actively manipulative defaults and cues (for example reversing a default that bundled poor value insurance with electrical products, or preventing the most misleading advertisements). Next might come policies that seek to help individuals make better choices in their own interests (for example defaults that encourage investment in pensions unless a person opts out). Such policies are easier to justify the more directly individuals themselves determine what is good for them – and this is complex because even individually-driven policies often entail assumptions as to how individuals would behave in some idealised choosing environment. Further along the continuum, we might identify policies that use similar techniques to benefit society, or at least some part of it other than the individuals targeted by the policy (for example defaults that promote energy conservation). It can, of course, be difficult to distinguish whether policies benefit individuals, society, or both (for example public information campaigns warning of the dangers of obesity may aim both to help individuals and to reduce healthcare costs borne by society). Finally, libertarian paternalist techniques might be used to manipulate individuals' choices for the benefit of governments or private interests (for example the positioning of tables in a casino). Again, some examples may be difficult to place in a single category (for example a reduction in the number of products in a range may reduce costs and increase demand for a manufacturer whilst also making purchasing decisions easier for consumers). In general, though, the further along this continuum a policy sits, the greater the difficulty of justifying it against this imperative and against several of the others set out below.

*Two: Explore how citizens might be right.*

Understanding how citizens' apparently irrational behaviour might be rational from their perspective requires a high degree of cultural sensitivity. Seeking to de-bias individuals who are irrational could easily lead to a heavy-handed approach that dismissed unexpected or unusual behaviour as erroneous. It is therefore important to ask why individuals might choose to behave in ways that seem irrational, giving due respect to influences such as beliefs, desires, and emotions, as well as culture and context (Cheer *et al*, 2002; Elster, 2009). This imperative counsels humility: just because, even on close examination, one cannot understand why people behave as they do, does not mean they are necessarily in error. Even when intervention is still deemed appropriate it may be better targeted at the underlying causes of individuals' behaviour rather than directly at the behaviour itself (see our discussion of over-eating in section 3 above).

Cheer *et al* (2002), for example, discuss the role of housing costs, culture and the material and emotional consequences of poverty in determining the behaviour of low-income households in Auckland. While the households' behaviour – which includes eating unhealthy food, postponing the use of healthcare services that are provided freely, and prioritising utility bills over weekly food shopping in household budgets – may appear irrational, it makes more sense when the beliefs, aspirations and social pressures acting upon them are considered. To dismiss their behaviour as irrational simply because it does not serve their interests as perceived by an outsider risks overlooking the complex interplay between social, cultural and emotional factors that give rise to behaviour.

*Three: Question notions of what is good.*

What the powerful think is good for individuals or for society may not reflect the views of society's members. Respect for diversity of opinion, including through political forums that allow for genuine disagreement and dissent, is necessary to avoid a situation in which policy-makers pursue their own notions of the good to the detriment of other people's. This is a general concern in democratic societies, and has, for instance, been taken up by environmentalists concerned about how environmental policy processes have outstripped the development of mechanisms that facilitate effective public participation in environmental governance (Spash, 2001). Nonetheless, the concern is particularly salient for libertarian paternalists insofar as their interventions both shape choices and are justified by means of a libertarian discourse. This imperative therefore extends the previous one: individuals' views regarding the overall objectives of a policy, as well as regarding their own interests, might be right.

*Four: Respect those not targeted.*

Ideally, libertarian paternalist policies should only affect the people who benefit from them (Morelli and Seaman, 2005). Where this is not possible, careful thought should be given to whether the costs to some sections of society outweigh the gains to others. These costs include the costs of self-checking imposed upon populations who are obliged to determine whether the policy does, in fact, apply to them, as well as the costs of mis-correction and anxiety discussed in the previous section. Even if a cost-benefit analysis suggested that a policy was worthwhile, the moral question of influence, if not power, being exerted over some to benefit others would remain.

*Five: Treat rationality only as a means.*

Action can be defined as rational insofar as it helps an individual or social group to achieve its ends. As Elster writes, 'rational-choice theory ... tells us what we ought to do in order to achieve our aims as well as possible. It does not, in the standard version, tell us what our aims ought to be' (1989, p3). He gives the example of a person who lives in a totalitarian regime and is deeply unhappy as a result of desiring freedom. Freedom is out of reach, and yet we would not call this individual irrational for continuing to desire freedom and continuing to be miserable without it: 'human beings are more than happiness machines' (1989, p5). In this case, a criticism of the unhappy individual as irrational makes sense only from the perspective that happiness (in some superficial, politically disengaged form) is the proper end of human life. One might therefore question a policy objective of encouraging rational action of a particular form without reference to ends, since whether an action is rational or not depends on the ends being pursued. Policies which purport to enable people to behave more rationally in general terms risk making implicit assumptions about ends, and such assumptions should be made explicit and then justified.

*Six: Avoid deception.*

Libertarian paternalist policies which work on the subconscious aspects of decision-making appear problematic. As Elster writes, 'one cannot be rational if one is the plaything of psychic processes that, unbeknownst to oneself, shape one's desires and values' (1989, p6). In this sense, libertarian paternalist techniques which covertly shape decisions in order to produce more rational-seeming behaviour look like contradictions in terms.

A libertarian paternalist might point out that human beings are in any case the 'plaything of psychic processes,' so fully autonomous rationality is a pipedream (see Sunstein and Thaler, 2003). In this vein, one could argue that an intervention to de-bias individuals who are subject to systematic errors of reasoning could facilitate freedom of choice. The question, then, is less about the application of libertarian paternalist techniques *per se* than about whether they are applied covertly or overtly. Thaler and Sunstein propose the adoption of John Rawls' publicity principle, which 'bans government from selecting a policy that it would not be able or willing to defend publicly to its own citizens' (Thaler and Sunstein, 2009, p244). The examples they give imply, as we would also suggest, that it matters not only whether a government is able and willing to explain a policy, but whether it actually does explain its policy to those affected. The difference concerns whether governments, or the affected citizens, judge whether policies are appropriate in each individual case.

This form of transparency becomes more difficult the greater the complexity of the policy landscape, and it may be particularly vulnerable to erosion given the increasingly complex politics of information surrounding modern government. For example, with respect to environmental governance Mol suggests that new constellations of power, outside traditional state structures, are crucially dependent upon degrees of disclosure and rules of informational access (2006). Mol expresses concern over the level of democratic involvement in information management, and the deep structural inequalities that result from differential access to information and knowledge. These concerns underscore the complexity of achieving transparency in both environmental governance and governmental practices more broadly.

*Seven: Maintain individuals' self-reliance.*

There is a potential trade-off between assisting people in making choices and enabling them to gain competence in choosing by making mistakes. The more libertarian paternalist interventions individuals are subject to, the more likely it is that their self-reliance will be undermined. Freedom is not necessarily enhanced if people become dependent on artificially benign decision-making environments. Insofar as one is sceptical of government's capacity to accurately determine what is best for people, moreover, there is no substitute for individuals' competence in choice-making. Nonetheless, choice is not a straightforward concept, and in particular we have seen that current preferences may themselves be a product of individuals' histories and environments. For instance, a person who eats large quantities of unhealthy food may do so because of a combination of choice, habit and addiction. Interventions that limit formal choice in order to break cycles of addiction arguably enhance the capacity to choose in the long run.

## **7. Conclusion**

This paper has explored the gap between the relatively narrow terms in which libertarian paternalism has been justified intellectually, and the much broader sphere in which the techniques of government associated with it are coming to be applied. Having reviewed existing critiques of libertarian paternalism under six themes – normality; rationality; human development; choice; individualism; and private interests – we also added two critiques of our own. Our critiques highlighted firstly the difficulties of justifying libertarian paternalist techniques being applied for socially rather than individually defined ends, and secondly the harm those techniques can do to those who are not their intended targets. Combining the pre-existing critiques with our own, we then set out seven imperatives as an aide-memoire of best practice for those who evaluate potential libertarian paternalist policies. The seven imperatives are: clarify and justify the ends pursued; explore how citizens might be right; question notions of what is good; respect those not targeted; treat rationality only as a means; avoid deception; and maintain individuals' self-reliance.

We have not proposed an alternative paradigm to libertarian paternalism. In our view, governments across the political spectrum could find libertarian paternalist policies useful. Notwithstanding the fact that the libertarian paternalist toolkit originated from within a liberal intellectual context, it could be applied in pursuit of a wide variety of political ends. Nonetheless, we have argued that some major flaws and limitations are at risk of being overlooked. In particular, the same level of attention needs to be given to the way in which libertarian paternalism interacts with social thought as has already been given to its interaction with psychological research.

Binary arguments for or against libertarian paternalism in general are of limited value. To disallow libertarian paternalist policies *per se* would represent a lost opportunity in many situations: this is particularly clear with respect to pensions, for example, where the choices made, and probably the defaults offered, without government intervention would clearly be detrimental to most individuals' well-being. It is equally clear, however, that libertarian paternalism has the potential for scope creep. A dystopian world of micro-managed dispositions, without respect for people's diversity and preferences, is imaginable. Careful thought needs to be given to the appropriate institutional containment and direction of powerful new government departments such as the UK's 'Behavioural Insight Team', for example (Pykett *et al*, 2011, p301). More broadly, a nuanced debate is needed over how much libertarian paternalism is appropriate, and of what kind.

Socially-driven libertarian paternalist policies raise particular questions about the politics and ethics of curtailing individual freedom. For example, could the ordering of choices on a ballot slip be organised strategically to ensure that troublesome parties do not get too much of the vote? Such a strategy would promote social objectives that might seem like clear common sense to most people whilst maintaining formal democratic choice, but would, we hope, make even libertarian paternalists uncomfortable (and indeed see Thaler and Sunstein 2009, p246). Parties which support free markets and those which support the abolition of property rights clearly differ over the social good. More subtly, parties which support sexual abstinence and those which support condom use in order to combat AIDS might agree on the ultimate end of policy, but disagree over the appropriate means of achieving it. Socially-driven



libertarian paternalists should therefore be particularly mindful of the impossibility of political and moral neutrality in the application of their toolkits.

This paper has had to adopt several concepts more or less uncritically in order to engage in the debate over libertarian paternalism on its own terms. Although much more could be said about freedom, choice, rationality, behaviour and society, in concluding we confine ourselves to a brief reflection on freedom. Libertarian paternalists are adamant that freedom is a good thing (otherwise they would simply be paternalists) but there are different degrees of practical freedom that a society might pursue. We are all constrained in practice by social norms, moral codes and emotional bonds that inhibit us from using many of our technical freedoms. At their best, libertarian paternalist policies mould our environment in ways that enable us, but do not oblige us, to more effectively exercise our freedoms when we want to. However, they could also lead towards an increasing proportion of our attempts to choose being second-guessed by authority, rendering the meaningful exercise of freedom theoretically possible, but practically out of reach. Behaviour is not independent of thought and identity: if a policy changes how people behave, it simultaneously changes how they think and who they are. We must remain vigilant against any rhetoric of freedom that glosses over the extent to which, intentionally or otherwise, those who use it limit choice in practice, and thus impose their own interpretations of the good life and the good society by the back door.

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### **References**

- Ainslie G, 1975, “Specious reward: a behavioral theory of impulsiveness and impulse control” *Psychological Bulletin* **82**(4) 463-496
- Bandura A, 1986, *Social Foundations of Thought and Action: A Social Cognitive Theory* (Prentice Hall, Englewood Cliffs, NJ)
- Barnes T, Peck J, Sheppard E, Tickell A, 2004, *Reading Economic Geography* (Blackwell, Oxford)
- Barnett C, 2009, “Publics and markets: what's wrong with neoliberalism?”, in *The Sage Handbook of Social Geography* Eds S Smith, R Pain, S Marston, J P Jones III (Sage, London) pp269-296
- British Broadcasting Corporation, 2009, *Anti-Obesity Ad Shocks New Yorkers*, Prentice C, 7th October, <http://news.bbc.co.uk/1/hi/8281203.stm>

- Berg N, Gigerenzer G, 2007, "Psychology implies paternalism?: bounded rationality may reduce the rationale to regulate risk-taking" *Social Choice and Welfare* **28**(2) 337-359
- Berg N, Gigerenzer G, 2010, "As-if behavioural economics: neoclassical economics in disguise?" *History of Economic Ideas* **18**(1) 133-166
- Bourdieu P, 1986, "The forms of capital", in *Handbook of Theory and Research for the Sociology of Education* Ed J Richardson (Greenwood, New York) pp241-258
- Burchell, G, 1996, "Liberal government and techniques of the self", in *Foucault and Political Reason: Liberalism, Neoliberalism and Rationalities of Government* Eds A Barry, T Osborne, N Rose (University College London Press, London)
- Butland B, Jebb S, Kopelman P, McPherson K, Thomas S, Mardell J, Parry V, 2007, *Tackling Obesities: Future Choices* Foresight Group, London, Government Office for Science  
<http://www.foresight.gov.uk/Obesity/17.pdf>
- Camerer C, 2006, "Wanting, liking and learning: neuroscience and paternalism" *The University of Chicago Law Review* **73** 87-110
- Camerer C, Issacharoff S, Lowenstein G, O'Donoghue T, Rabin M, 2003, "Regulation for conservatives: behavioural economics and the case for 'asymmetric paternalism'" *University of Pennsylvania Law Review* **151** 1211-1254
- Change4Life, 2011, Website available at <http://www.nhs.uk/Change4Life/Pages/change-for-life.aspx>
- Cheer T, Kearns R, Murphy L, 2002, "Housing policy, poverty, and culture: 'discounting' decisions among Pacific peoples in Auckland, New Zealand" *Environment and Planning C: Government and Policy* **20**(4) 497-516
- Cialdini R B, 2007 [1984], *Influence: The Psychology of Persuasion* (HarperCollins, New York).
- Coleman J, 1988, "Social capital in the creation of human capital" *American Journal of Sociology* **94** S95-S120
- Crossley D, 1999, "Paternalism and corporate responsibility" *Journal of Business Ethics* **21** 291-302
- Department for Transport, 2010, *Think! Road Safety: 'Speed – Urban'* Video Campaign  
[http://www.dft.gov.uk/think/focusareas/driving/?whoareyou\\_id=&page=Overview](http://www.dft.gov.uk/think/focusareas/driving/?whoareyou_id=&page=Overview)
- De Waard D, Dijksterhuis C, Brookhuis K, 2009, "Merging into heavy motorway traffic by young and elderly drivers" *Accident Analysis & Prevention* **41** 588-597
- Elster J, 1989, *Solomonic Judgements: Studies in the Limitations of Rationality* (Cambridge University Press, Cambridge)

- Elster J, 2009, *Reason and Rationality* (Princeton University Press, Princeton, NJ)
- Foucault M, 1977, *Discipline and Punish: The Birth of the Prison* (Allen Lane, London)
- Furedi F, 2002, *Culture of Fear: Risk Taking and the Morality of Low Expectation* (Continuum, New York and London)
- Glaeser E L, 2006, "Paternalism and psychology" *The University of Chicago Law Review* **73** (1) 133-156
- Goffman C E, 1961 repr. 1970, *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates* (Penguin, Harmondsworth)
- Green T, 1983, "Liberal legislation and freedom of contract" in *The Works of T. H. Green (Vol. III)*, 2011, Ed R Nettleship (Longmans, London) pp365-386
- Greenberg P, Sisitsky T, Kessler R, Finkelstein S, Berndt E, Davidson J, Ballenger J, Fyer A, 1999, "The economic burden of anxiety disorders in the 1990s" *Journal of Clinical Psychiatry* **60** 427-435
- Halpern D, Bates C, Mulgan G, Aldridge S, Beales G, Heathfield A, 2004, *Personal Responsibility and Changing Behaviour: The State of Knowledge and its Implications for Public Policy* (Strategy Unit, London)
- Harkey D, Robertson H, Davis S, 1990, "Assessment of current speed zoning criteria" *Transportation Research Record* **1281** 40-51
- Harvey D, 2007, *A Brief History of Neoliberalism* (Oxford University Press, Oxford)
- Horberry T, Hartley L, Gobetti K, Walker F, Johnson B, Gersbach S, Ludlow J, 2004, "Speed choice by drivers: the issue of driving too slowly" *Ergonomics* **47** 1561-1570
- Jessop B, 1990, *State Theory: Putting Capitalist States in Their Place* (Polity Press, Cambridge)
- John P, Smith G, Stoker G, 2009, "Nudge nudge, think think: two strategies for changing civic behaviour" *The Political Quarterly* **80** 361-370
- Johnson E, Goldstein D, 2003, "Do defaults save lives?" *Science* **302** 1338-1339
- Jones R, Pykett J, Whitehead M, 2011 "Governing temptation: changing behaviour in an age of libertarian paternalism" *Progress in Human Geography* **35**(4) 483-501
- Jordan A, 1999, "The implementation of EU environmental policy: a policy problem without a political solution?" *Environment and Planning C: Government and Policy* **17**(1) 69-90
- Kahneman D, Knetsch J, Thaler R, 1991, "Anomalies: the endowment effect, loss aversion, and status quo bias" *Journal of Economic Perspectives* **5** 193-206

- Kahneman D, Tversky A, 1979, "Prospect theory: an analysis of decisions under risk" *Econometrica* **47** 313-327
- Klick J, Mitchell G, 2006, "Government regulation of irrationality: moral and cognitive hazards" *Minnesota Law Review* **90** 1620-1663
- Lake A, Townshend T, 2006, "Obesogenic environments: exploring the built and food environments" *The Journal of the Royal Society for the Promotion of Health* **126** 262-267
- Larner W, Walters W, (eds.) 2004, *Global Governmentality: Governing International Spaces* (Routledge, London)
- Lave C, 1985, "Speeding, coordination, and the 55-MPH limit" *American Economic Review* **75** 1159-1164
- Lawless P, 1991, "Urban policy in the Thatcher decade: English inner-city policy, 1979-90" *Environment and Planning C: Government and Policy* **9**(1) 15-30
- Le Grand J, 2008, "The giants of excess" *Journal of the Royal Statistical Society* **171** 843-856
- Lockton D, Harrison D, Stanton N, 2008 "Making the user more efficient: design for sustainable behaviour" *International Journal of Sustainable Engineering* **1** 3-8
- Mol A P J, 2006, "Environmental governance in the information age: the emergence of informational governance" *Environment and Planning C: Government and Policy* **24**(4) 497-514
- Pain R, Smith S, 2008, *Fear: Critical Geopolitics and Everyday Life* (Ashgate, Aldershot)
- Pavlov I P, 1927, *Conditioned Reflexes* (Oxford University Press, Oxford)
- Peck J, Tickell A, 2002, "Neoliberalizing space" *Antipode: A Radical Journal of Geography* **34** 380-404
- Peet R, 2007, *Geography of Power: The Making of Global Economic Policy* (Zed books, London and New York)
- Perrin E, Boone-Heinonen J, Field A, Coyne-Beasley T, Gordon-Larsen P, 2010, "Perception of overweight and self-esteem during adolescence" *International Journal of Eating Disorders* **43**(5) 447-454
- Pichert D, Katsikopoulos K, 2008, "Green defaults: information presentation and pro-environmental behaviour" *Journal of Environmental Psychology* **28** 63-73
- Pierson C, 2004, *The Modern State* 2nd edition (Routledge, Oxford)
- Poulantzas N, 1973, *Political Power and Social Classes* (Verso, London)
- Prochaska J O, DiClemente C C, 1983, "Stages and processes of self-change of smoking: toward an integrative model of change" *Journal of Consulting and Clinical Psychology* **51** 390-395

- Putnam R, 1995, "Bowling alone: America's declining social capital" *Journal of Democracy* **6**(1) 65-78
- Pykett J, 2012, "The new maternal state: the gendered politics of governing through behaviour change" *Antipode* **44**(1) 217-238
- Pykett J, Jones R, Whitehead M, Huxley M, Strauss K, Gill N, McGeevor K, Thompson L, Newman J, 2011, "Interventions in the political geography of 'libertarian paternalism'" *Political Geography* **30** (6) 301-10
- Rodríguez-Pose A, Gill N, 2003, "The global trend towards devolution and its implications" *Environment and Planning C: Government and Policy* **21**(3) 333-351
- Rose N, 1996, *Inventing our Selves: Psychology, Power and Personhood* (Cambridge University Press, Cambridge)
- Rose N, 1999 [1989], *Governing the Soul: The Shaping of the Private Self*, 2<sup>nd</sup> ed. (Free Association: London and New York)
- Schultz P, Nolan J, Cialdini R, Goldstein N, Griskevicius V, 2007, "The constructive, destructive and reconstructive power of social norms" *Psychological Science* **18** 429-434
- Simon H A, 1956, "Rational choice and the structure of the environment" *Psychological Review* **63** 129-138
- Skinner B F, 1953, *Science and Human Behavior* (Macmillan, New York)
- Spash C L, 2001, "Broadening democracy in environmental policy processes" *Environment and Planning C: Government and Policy* **19**(4) 475-481
- Strauss K, 2009, "Cognition, context, and multimethod approaches to economic decision making" *Environment and Planning A* **41**(2) 302-317
- Sunstein C, 1991, "Preferences and politics" *Philosophy & Public Affairs* **20**(1) 3-34
- Sunstein C, 2006, "Boundedly rational borrowing" *University of Chicago Law Review* **73** 249-270
- Sunstein C, Thaler R, 2003, "Libertarian paternalism is not an oxymoron" *University of Chicago Law Review* **70** 1159-1199
- Svihra M, Katzman M, 2004, "Behavioural inhibition: a predictor of anxiety" *Paediatrics and Child Health* **9** 547-550
- Swinburn B, Egger G, 2002, "Preventive strategies against weight gain and obesity" *Obesity Reviews* **3** 289-301
- Thaler R, Benartzi S, 2004, "Save more tomorrow: using behavioral economics to increase employee saving" *Journal of Political Economy* **112** S164-S187

Thaler R, Sunstein C, 2003, "Libertarian paternalism" *The American Economic Review* **93** 175-179

Thaler R, Sunstein C, 2009 [2008], *Nudge: Improving Decisions About Health, Wealth and Happiness* (Penguin, London)

*The Economist*, 2010, "You choose", 12<sup>th</sup> August, **397**(8713) 123-125

Tignor S, Warren D, 1990, "Driver speed behavior on U.S. streets and highways", in *1990 Compendium of Technical Papers* Institute of Transportation Engineers (ITE, Washington DC) p85

Tversky A, Kahneman D, 1974, "Judgement under uncertainty: heuristics and biases" *Science, New Series*, **185**(4157) 1124-1131

VanDevender C, 2008, "How self-restriction laws can influence societal norms and address problems of bounded rationality" *The Georgetown Law Journal* **96** 1775-1806