

From nudge to nudge plus: behavioural public policy for a self-guiding society

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Abstract

Policies based on nudge have proven to be both popular and controversial. Choice architecture reforms have won support from governments for improving the effectiveness of public policies. Yet nudge has attracted criticism for both being manipulative and failing to meet a wider range of citizen needs. Is there a way of reconciling the success of these behavioural interventions while responding to criticisms? In this paper, we argue that what is required is more than ad hoc advances in nudge practice but rather a theoretical reorientation of nudge addressed by expanding the cognitive foundations of the policy and moving nudge from a technocratic framing to one compatible with a self-guiding society. This shift opens up a number of “nudge plus” options that link nudge interventions with citizen reflection and initiative and presents it as a support to other tools rather than a standalone mechanism.

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Introduction

This article explores why governments and consultancies are embracing nudge policies but also why many observers remain worried by it. We use nudge as a short hand for a family of intervention tools based on presenting information to citizens to provide a positive trigger for them to act in their own interests and to support collective goals. These relatively unobtrusive measures have influenced considerably the wider agenda of behavioural public policy and have almost come to define it. We show that nudge tools have, in less than a decade since the publication of *Nudge* (Thaler and Sunstein, 2008), become part of the toolkit of modern government, even though by no means universally adopted. Yet the approach remains mired in controversy as the next section establishes. We reflect on a number of ethical criticisms about nudge as well as a number concerns about lack or limited impact of nudge interventions. We conclude that these attacks hit home against ideas attached to nudge policy in the era in which it was launched but which are not central to its future development.

It is central to provide better foundations for the future progress of nudge. We argue for a theoretical reorientation to drive change in nudge policy. First, we revisit the cognitive foundations of nudge policy. We suggest a more rounded understanding of the dynamics of human decision-making, less exclusively focused on the dominance of intuitive processes and their fallibilities. This approach allows more scope for the reflective capacities of human beings and in doing so opens up a rather different policy direction. Related to this point we argue nudge placed itself in one tradition of social problem solving where science and experts are in the lead. Nudge says to citizens you are free to choose but what you get to choose and how those choices are framed is driven by expert initiative sanctioned by government officials. This technocratic framing helps to explain why nudge polices face repeated criticism in liberal and open societies. But, as Lindblom (1990) points out, there is another less well-articulated model of social problem solving that meets the ideals of ‘a self-guiding

society' that would, we argue, embrace and develop nudge policy in a rather different way giving greater scope to lay insight and control.

Being armed with a wider cognitive palate and a more citizen-oriented policy model provides nudge policy an opportunity to escape from its critics. We argue that nudge policy needs to reset its sights towards a different kind of intervention called "nudge plus". The "plus" part of the policy of the policy captures two main points that meet the two lines of criticism of the approach, which have dominated current debates. First, nudge plus needs to meet the challenge of paternalism by looking not only to experts or governments to lead behaviour change but rather to give citizens the space and capacity to make changes to their lives. Second, nudge needs to be presented and applied not as a standalone policy but rather as mechanism for helping deliver behaviour change alongside other tools of government.

The Triumph of Nudge

Nudges do not rely on fiscal incentives or overt regulation. They do not command or provide a strong economic incentive to citizens to drive change. 'To count as a mere nudge, the intervention must be easy and cheap to avoid' (Thaler and Sunstein, 2008: 6). Nudge works with the cognitive capacities of people to allow information to be absorbed by them more effectively, and so provides a positive trigger for them to act in their own interests. In a time-pressured and complex world people use a range of short cuts to make decisions, and understanding and adapting to those short cuts will lead to interventions and information flows that go with the grain of how people think.

The idea of steering the choices of citizens through 'better governance' (Thaler and Sunstein, 2008: 15), which does not rely on costly regulation or financial incentives, found a ready home among policymakers in an era post the financial crisis of 2007/8 where government was seen as needing to do more for less and at the same time viewed as lacking

the legitimacy to pursue more traditional or stronger forms of intervention. During Obama's presidency (2009-17), behavioural science informed numerous policy measures in part inspired by Cass Sunstein's presence in the administration (Sunstein, 2014). In the United Kingdom, the Behavioural Insights Team (BIT), in operation since 2010, advised regularly by Richard Thaler (2015), used insights from behavioural studies to launch initiatives across a range of areas (Halpern, 2015). In 2016, the federal level of government in Australia established the Behavioural Economics Team of Australia (<https://www.dpmc.gov.au/domestic-policy/behavioural-economics>) building on earlier initiatives at the state level. The World Bank (2015) wrote a report in praise of behavioural change and created a Global Insights Team (<http://www.worldbank.org/en/programs/gini>) that uses psychology and behavioural insights to improve social outcomes. Both the Organization for Economic Co-operation and Development (<http://www.oecd.org/env/tools-evaluation/behavioural-experimental-economics-for-env-policy.htm>) and the European Union (European Commission, 2016) have shown an interest in collecting cases studies of successful behavioural change and nudge policies. There is no doubt that a momentum has moved behind nudge.

Progress continues in nudge policy and as the 2017 report from Behavioural Insights Team there are signs that the scope and range of interventions is expanding with 'a gradual shift to more complex behavioural challenges' (BIT, 2017: 4). The range of countries and government willing to use insights from nudge is also increasing. One option would be to let the programme learn from experience and expand. But the scale of criticisms that the approach continues to attract reflect theoretical flaws at its foundations that need to be addressed. We pursue these arguments in what follows.

Assessing the Criticisms of Nudge

There are two related lines of criticism. One worries about the ethics of nudge in that while it allows for individual choice it remains paternalistic and potentially manipulative (Dobson 2011; Goodwin, 2012; Jones et al, 2013; Rebonato, 2012; Wilkinson, 2013). The second line of censure rests on a concern that gentle prompting of individuals while preserving their autonomy may not be effective in dealing in a sustained manner with the more challenging processes of behaviour change and a wider concern that nudge has focused on a partial range of behaviour targets (Mols et al, 2015; House of Lords, 2011; Marteau et al, 2011). On the ethical front we deal with issues of autonomy and manipulation. On the impact concern, we explore the limited range of nudge interventions many of which appear to focus on ensuring that citizens' match up to their civic responsibilities, difficulties in establishing long-term term effects and doubts about whether the nudge approach can tackle more ingrained behavioural problems.

The autonomy dilemma

A key way into reconstructing the debate about nudge is to start with the ethical dimension. In many ways, a lot of the nudges do not seem to raise many ethical concerns from first blush. What is the real negative impact of letter redesigns for example? But even minor activities done without the consent of knowledge of the citizens and with the purpose of manipulating them offends common norms for carrying out public policies, that of transparency and openness. Even when done for something quite routine, nudge policy can be viewed as unethical as it undermines autonomy, the idea that people should make their own choices, even when being prompted and they can opt out of the prompt. Nudge has attracted a lot of argument in this vein, partly because its advocates Thaler and Sunstein (2008) made a great play with the term libertarian paternalism, which implied that policies that are carried

out in the interests of the citizens without their consent could at the same time be consistent with upholding their freedom. The basic idea behind nudge is that people are free not to follow the nudge and to take the opposite action if they decide to do so. The paternalistic side is that the public authority is arranging things to influence the choices of individuals. Thus, ‘choice architects can preserve freedom of choice while also nudging people in directions that will improve their lives’ (2008: 252). Much turns on the term paternalism. Anderson (2010: 372) comments, ‘As Thaler and Sunstein use the term, however, it becomes equivalent to beneficence: when the government acts to improve people’s welfare by influencing choices in any way, it is engaging in paternalism’ (2010: 372). This is a hard argument to get out of: it may be soft paternalism but it’s still paternalism.

Thaler and Sunstein are also vulnerable to an attack that the citizens were not free to choose an alternative option because the choice architecture guided them subconsciously to their own ends. To respond to this criticism, the authors of *Nudge* argue for the publicity principle that ‘bans government from selecting a policy that it would not be willing to defend publicly to its citizens’ (2008: 244). But critics remain unconvinced as Anderson (2010) argues ‘the espousal of transparency and publicity constraints comes across as an artificial and ad hoc declaration of values that belies a lack of real interest in the importance of ensuring that those subjected to these subtle forms of state power understand the underlying rationale.’ (374).

One line for defending nudge is that choice is anyway constrained by government policies and a range of private sector interventions, as well as by social institutions. As Thaler and Sunstein write, ‘nudges are everywhere, even if we do not see them’ (2008, 252). Liberals have classically argued against libertarians that there is no first state of liberty from which an intervention or law removes freedom – whatever a public agency does affects freedom. Choice architectures are created whatever the public agency does, the question is

whether they are designed with the right choices embodied in them. But a common response to this point is to ask: should government or citizens be the arbiters of what is a good decision? Nudge policy - as practiced in its first decade - did appear to give a strong priority to smart ideas from experts advising government, leaving citizens as the unwitting victims. In other policy realms, of course citizens delegate decisions about welfare to politicians who run expert and professionalized bureaucracies so nudge is probably not that different to most policies and regulation measures. Encouraging full autonomy of citizens to own the nudges and to debate them is not realistic, but could the balance could be tipped in the direction of citizen control and autonomy so as to keep nudges more consistent with this autonomy-preserving claims. We shall return to this issue later in article.

Fear of manipulation

Another general concern about the ethics of nudge focuses on manipulation, that people might be encouraged to do things they do not really want to do by an all-seeing government. This issue can turn on how far citizens should be made aware that they are being the subjected to a nudge. Certain strong kinds of manipulation could be off limits - those involving strong deception for example – and some of the nudges could be altered to make them less manipulative (see Wilkinson 2013). Sunstein (2017) returns to these issues. He maintains his view that there are already many nudges in operation and makes an argument for deciding the moral content of nudges on a case-by-case basis. In passing he offers public opinion survey findings that indicate that people agree with nudges if they approve of the end being promulgated. The main difference is that partisan affiliation affects their approval rating. Jung and Mellers's (2016) study shows that the US public tend to favour the more overt nudges. People also prefer the pro-social nudges from the more pro-self-ones, such as recycling and other collective goods (see also Felson et al 2013). Citizens it could be argued do not fear nudges and they can accept the idea of being manipulated for their own good.

The debate takes a sinister turn when critics talk of nudge being implicated in the emergence of a psychological state (Jones et al 2013): harnessing the behavioural sciences to exercise greater and more effective control over citizens, reducing their autonomy and freedom. Former sorts of authority were not efficient and could not harness individual behaviour effectively. Citizens benefited from a degree of inefficacy in the actions of government bureaucracies that worked with imperfect knowledge. The argument is that by using about behaviour change knowledge government can realize the Weberian ideal of the rational bureaucracy that oppresses freedom, much as Weber feared. Yet this argument overplays the all-seeing nature of policymakers, even with behavioural tools in their hands. They are more likely to be groping in a fragmented and diverse way for options that work rather than being a unified group faithfully following a strategy of control.

Partial range

Beyond an anxiety with ethical issues a further concern about nudge is that many of the interventions are focused on large routine transactions between public agencies and the public, such as tax reminders, court fines, and various other reminders and cues. These initiatives have the advantage of demonstrating that nudge interventions can make a practical and financially beneficial contribution to good governance but they can appear to lack ambition. From a citizen perspective nudge appears to be more about responsibilities rather than rights and more about efficiency in a narrow sense in public programmes rather than effectiveness or responsiveness in public service delivery.

There are several counter-arguments to consider. First the circumstances of launching a new programme of work may have encouraged a focus on the need to demonstrate proof of concept that could in the future be relaxed. The search for quick wins led to the adoption of policies whose value could be quickly shown. But there is nothing in principle against nudge

policy extending its range. We would suggest that nudge would seem well adapted to focus on rights (social rights/entitlements, such as right to vote, right to stand for election, right to complain, right to take up benefits or tax advantages people are entitled to, and a right to switch utility supplier or banks) and there are lots of applications that help to maximize individual wellbeing (not just societal utility), such as healthy eating nudges which benefit individual health as well as societal health.

Short-term impacts

There is a further challenge to nudge policy which is captured by the concern that its impacts are short-term. There are two arguments that are used to support this concern. One is that after a while citizens will get wise to the nudges and so will discount their impact. Nudges can reframe citizens' decision-making in the short run but may not be sustainable in the long-run once they find out they are being manipulated. Another argument is that there is a big difference between social norms that are followed as a result of nudge-style external intervention (the message could range from "this is a convenient option" to "others are doing this") and an internalized norm approach which is based on encouraging the citizen to incorporate the norm internally into the sense of who they are. As Reynolds et al (2014, 3) comment, 'A common emphasis in most definitions concerns the degree to which norms, as rules about human social behaviour, are internalized as part of a person's sense of self-definition ("who am I", "who we are") or are forces external to the person that have impact through peer pressure and conformity (e.g. fear of social sanctions). This distinction is important because whether norms impact on behaviour through internal or external processes has implications for the sustainability of the behaviour and costs of surveillance'. Specifically nudges that rely on external intervention on its own with no scope for embedding in a more profound internal manner inside citizens may work in the short run but not in the long run.

They may pay their taxes this year but not next but if a norm-based culture of compliance could be established citizens would in general be attuned to paying up their taxes each year (see also Mols et al, 2015). Overall, other than evidence for spillover of behavioural interventions (Dolan and Galizzi 2015), there is a lack of evidence whether the impact of nudges extends into the long-term. There is probably more evidence of the longitudinal impacts of other government programmes; but in general evaluation research tends to examine short-run impact, so nudge is not alone in this respect.

To tackle the issue of short-term impact nudges could be built more into institutions so that they are not designed as short-term measures. Nudges may be repeated over time, which reflects their low-cost nature. Behavioural researchers do know that such repeated treatment can fade in effectiveness over time as respondents get used to the nudge. Sometimes nudges depend on novelty, and once they are delivered a few times, then that wears off. Other nudges depend on the recipient not knowing they are being nudged. This is because the response needs to be automatic, that is from unconscious non-reflective processes. If they find out they are being nudged, they will think about it, also may not like being manipulated. If nudges are repeated over time, then they are more likely to be detected. But nudges can be varied and this is normal practice in the private sector with companies like Google and Amazon varying their nudges. These companies survive and prosper with such strategies. Some experimental research suggests that finding out about being nudged does not alter responsiveness to the intervention (Loewenstein et al 2015).

Another more sophisticated idea, which reaches beyond habit and repetition of nudges, is the idea that nudges can be part of a journey to a new set of outcomes, a way of moving to one equilibrium with negative outcomes for individuals and the communities they are part, to a more positive equilibrium point. In the words of one report, it is about nudging the S-curve, which is about affecting the pattern of diffusions and rate of change of adoptions

(Brook Lyndhurst 2006). Given the complexities of behaviour change, a model of ceaseless innovation with varied nudges as a repeated tool could provide a way forward.

Lack of power to effect change

Another criticism is that nudge cannot shift ingrained behaviours. Its light-touch interventions might mislead citizens and policymakers that progress is being made when it is not. Marteau et al (2011) cites the study of food labels that show that they can false convey reassurance (Wansink and Chandon 2006). The more challenging argument is that nudges may not address core behaviours, or may prevent an individual from considering the full range of options, and be reassured by messages that go with the grain of their intuitions. The complaint is that reliance on nudge tends to de-privilege more interventionist policies on the part of government by stressing light-touch, non-regulatory and fiscally cheap policies, (Marteau et al, 2011; House of Lords, 2011; Goodwin, 2012) In short, the state should be trying to *budge* individuals – using more traditional government tools - rather than nudge them (Oliver 2013). A further extension of this argument (see Jones et al 2013) is that nudge does not consider more radical causes of policy problems, focusing on the individual causes of policy problems and not the wider structural reasons to do with a market economy, which is what nudge may be seen to do.

One reply from advocates of nudge such as the UK's Behavioural Insights Team (Halpern and Mason 2015) is to celebrate the idea that through many small steps radical transformation may come about, a practice they call radical incrementalism. But another option and one we favour is to argue that there is no reason to see nudge as a standalone policy mechanism. It was promoted as such by some early adopters and advocates in tune with the era of austerity and limited government that they identified but in practice almost all nudges work with other governmental tools. Even the much-promoted capacity for a few

word changes in a letter to drive up tax returns still relies of the fact that the letter comes with a Tax Office letterhead and therefore with the threat of the law and stronger interventions connected to it if the receiver does not comply. Equally, even those who advocate a willingness to use more traditional tools of regulation or incentives suggest that the tailoring of those tools using nudge would be beneficial (Oliver, 2013). What these criticisms suggest is that nudges need modification so they are not so much short-term initiatives and they can be more powerful.

A way forward?

Nudge policy does not depend on defending the idea of libertarian paternalism offered up by Thaler and Sunstein (2008). The ethical challenges facing nudge are to a degree tied to the claims of libertarian paternalism that in turn are not essential to justifying nudge. It cannot be denied that a nudge intervention is a form of soft paternalism and it is to a degree manipulative. But so is regulation and a financial incentive. Nudge practices are public policies authorized by democratically elected governments and subject to review. They are accountable like any other policy designed to improve welfare. Their ethical acceptability depends on how open and effective are these procedures. Like all policies and policy tools they raise ethical issues of harm to people and the right balance of trade-offs between objectives citizens care about such as welfare equality justice and rights. In practice because nudges are so closely linked to using other tools of government such as laws, fines, incentives and so, it does not make sense to distinguish particular moral claims for using a nudge compared to another instrument. Nudge policies still have to answer to issues of proportionality, fairness, responsiveness and reasonableness as do other policy instruments. These are significant ethical concerns that are similar to those raised with other mechanisms.

Nor does nudge have to be seen as a standalone, low-cost, alternative to mainstream practices of regulation or incentive provision as it was framed by some politicians and bureaucrats to meet their preference for less public spending and government intervention. Some of the most exciting interventions of recent years have combined both a nudge and an item of regulation at the same times, such as salience and taxation (Chetty et al 2009). Bhargava and Loewenstein (2015) argue that stronger application of nudges to regulatory policies is where future opportunities lie. Freeing nudge policy from these two pieces of unnecessary baggage is not sufficient, as there are deeper flaws that need to be addressed.

Revisiting the Theoretical Foundations of Nudge

There is an underlying issue about how nudge developed under Thaler and Sunstein's guidance through the framework of expert promotion of non-coercive paternalism. By reducing cognitive demands on the citizen, nudge suffers from the problem of lack of consent and of too much reliance on the state to consider what is best. But is it necessary to be so negative about the cognitive capacity of citizens in comparison to experts? We would argue that by revisiting the cognitive foundations of nudge it is possible to come up with a way forward rather different to that of the path chosen by its original advocates. Put alongside that a non-technocratic framing of how best to address policy concerns and nudge policy is then freed to take a different direction that relies less on a collection of desirable modifications and more on a new set of foundations.

Chapter 1 of *Nudge* (Thaler and Sunstein, 2008) provides an enjoyable summary of the "biases and blunders" that afflict humans primarily as a justification for some gentle intervention to improve their chances of making better decisions. But, as the title of the chapter suggests, their focus is then entirely on the limits of the automatic mode of thinking. The practice of nudging that flows from this and has dominated its application in the USA,

UK and elsewhere, which is premised on the idea of experts identifying the failing of citizens to achieve rationality in their decisions, developing a corrective nudge and helping those in authority to implement it. As such, key nudge advocates fall into the tradition of welfare economics where a committee of experts ask: ‘what is good for society from an impartial perspective – the ‘view from nowhere’. Explicitly or implicitly, its recommendations are addressed to an imagined benevolent despot’ (Sugden, 2011:1). Experts decide what is the problem, decide how a better outcome could be delivered judged by what citizens would choose if they were more fully rational in their decision-making and give the tools to intervene to those in authority as they have the power to make a difference. These steps are problematic in three ways. First, they underestimate the degree of connection between the automatic and more reflective systems and falsely judges the capacities within each. Second, they assume that citizens are cognitive misers, that they do not like to think and will avoid doing so if possible. Third, these steps place too much faith in the role of experts.

We propose two correctives. One focused on expanding the cognitive palate available to the nudge approach and the other on downgrading the role of experts and presenting the tackling of social problems as a task for knowledge from multiple sources.

Expanding the Cognitive Model

We can agree that citizens reason - in the sense they have reasons for doing what they do but that those processes of reason are framed by the bounds of their cognitive capacity and the environment in which they are located (Lupia et al, 2000). We can also allow that it is helpful to start with is a distinction between two types of cognition: System 1 (automatic, fast) and System 2 (reflective, slow). However, the differences between System 1 and System 2 reasoning (Stanovich and Toplak, 2012) reflect relative rather than absolute divisions. Overall, what Kahneman (2011) calls the fast thinking of System 1 operates quickly and automatically and generates impressions and inclinations. System 2 thinking, in contrast,

requires more effort. It involves concentration and is experienced more directly as conscious reflection and as a choosing between cognitive alternatives. Thinking in System I mode is the dominant form of human reasoning. There are many kinds of System 1 thinking and they come from different sources and paths. Some are innate to the human condition, the product of evolution and reflective of the need for humans to respond quickly and effectively to a complex range of ever changing messages about their environment, as in the flight response when a surprise treat emerges. Type 1 thinking is an invaluable tool in a complex world where information is limited or difficult to process. Its role is to enable people to make sense of their world and it constantly interacts with System 2 style thinking. Again, it is important not to be too bold in making a distinction between the two forms of reasoning.

The point is that citizens are rarely in a state where their thinking is clueless. Even in System 1 mode research suggests (Popkin, 1991) that they can use heuristics- mental short cuts requiring little effort or information to be brought into play - to make judgements that are good enough and a reliable guide to what they might choose if they had more information or put in more cognitive effort into making the judgement. This is not to suggest that citizens only follow their heuristics, but rather they adopt them more automatically and intuitively, without a great deal of concern. Moreover, their judgements in this fast thinking mode are likely to be partial and prone to bias (Kuklinski and Quirk, 2000). But just as Simon (1948) concluded in respect of the bounded rationality driving the decisions of bureaucrats the reasoning is often good enough. Moreover, the step into less automatic more reflective thinking is not over some great divide. The differences between the two modes is relative and incidentally it can be noted that people make blunders and adopt biases even when thinking in more reflective mode. Thinking is a flawed process but we should not assume that people are unable to come up with the answers that are right for them.

Thaler and Sunstein tend to assume that citizens are cognitive misers. Yet according to Kruglanski (1996) people are flexible social thinkers who choose between cognitive strategies (i.e. speed/ease vs. accuracy/logic) based on their current goals, motives, and needs. Kruglanski argues that people are neither exclusively cognitive misers nor great reflective thinkers, but in fact motivated tacticians. Put another way, people are strategic in their allocation of cognitive resources and as such can decide to be a cognitive miser or a reflective thinker depending on several factors (see Gigerenzer 2015).

The distinction between nudge and think (John et al, 2009; 2011) has been used to identify two types of change strategies: one associated with nudge policy aimed at individuals and the other associated with techniques to encourage collective consultation and deliberation. But here we offer a different argument that many interventions that start with a nudge require a degree of think from the individual. In practice, a lot of nudges are not as automatic as they first appear, but have a lot of “think” embedded in them.

Shifting from a technocratic to a self-guiding framing

There are reasons to doubt the credentials of experts, while not denying them a role. Experts should take care if they claim they know what citizens would choose if they were thinking more clearly. As Sugden (2011:31) argues,

Determining what a person would choose, were she perfectly rational, is not just a matter of discovering given facts about her. The concepts of full attention, perfect information, unlimited cognitive ability and complete self-control do not have objective definitions; they are inescapably normative. Just about any intervention that a paternalist sincerely judges to be in the individual’s best interests can be justified in this way if the paternalist is allowed to define what counts as attention, information, cognitive ability and self-control. The claim that the paternalist is merely implementing what the individual would have chosen for herself under ideal

conditions is a common theme in paternalistic arguments, but should always be viewed with scepticism.

There is a different way to approach the issue of how to use expertise. Instead of getting experts, as is the standard practice of nudge, to decide what is in the best interests of others; instead their expertise could be used to support others to obtain the capacities to make their own choices.

More generally nudge needs to be framed not as a technocratic project and more as a tool for supporting a self-guiding society. Such a shift will allow nudge to make itself in tune with the principles of policymaking in liberal and open societies and will avoid the confusions created by the claims of liberal paternalism. The core argument comes from Lindblom (1990) but finds reflection in other debates about public policy (Hoppe, 1999). Nudge initially was framed by science-led model where experts on how humans think offer practical ideas drawing on their knowledge to improve public policy. As Lindblom argues, such a science led model has a long but not always honorable history. Given societal complexity, the limits to knowledge and the sensitivity of behavioural change that inevitably tends to require value choices then Lindblom is surely right to suggest a more pluralistic and cautious approach to applying science to policy. The alternative framing which Lindblom refers to as social problem solving for self-guiding societies calls instead for policy to mix insights from experts and public officials with those of citizens and other actors. It is a process where experts are not in the lead but where they are supporters to a process of change driven by citizens and others. It calls for a policy process that is open and dynamic. It looks to a competition of ideas in a never-ending search for solutions to social problems. In many ways it is framing compatible with the practice of nudge with its commitment to trialing and testing but crucially it argues that initiating and judging

nudges needs to be pluralistic activity. To borrow the phrasing of Hoppe (1999: 209), we need less ‘speaking truth to power’ and ‘more making sense together’.

Towards Nudge Plus

A program of nudge plus would meet the charge of paternalism head on by looking not only to experts or governments to lead behaviour change but rather to give citizens the space and capacity to make changes to their lives. Second, nudge plus would recognize that effective nudges work alongside other influences of people’s behaviour needs to be presented and applied not as a standalone policy but rather as mechanism for helping deliver behaviour change alongside other tools of government. Several ideas about how to develop nudge would seem compatible with this “nudge plus” reframing

Understanding your role in the system

Hallsworth et al (2015) randomised SMS messages to outpatients in the NHS with a treatment messages that indicates the costs of missing an appointment and which led to less people missing their appointments. This nudge is the activation of a norm of attendance. But it is more than a simply automatic fast thinking process. Rather what is happening is that patients are being asked to reflect about the consequences of their decisions. Entailed in the nudge in the need for the respondent to understand the argument that missed appointments cost money. The reminder operates through automatic fast thinking mode to bring the issue to their attention but the behaviour is changed in part because of the slow thinking reflection it stimulates.

It is the case that many nudges can appear to be initially appealing for a fast thinking response but in practice are about stimulating reflection of your role or even duty as a citizen

in the production of public services. John and Blume (2017) sought to nudge holders of blue badges, which allow people with disabilities to park their cars in designated places, so it is easier for them to get to shops and public facilities, to renew online which is much cheaper for the public authority, which must issue such badges. The researchers administered a nudge that said that the public authority would save money if people signed up online and use that money to support services. Not all variations in the message worked but one that did required respondents to understand the argument and then to believe the council would spend the saved resources on services. Many standard nudges require some thought on the part of the respondent as they are often seeking to convey an action in a complex public policy system. Consider the very widely implemented nudge to use peer information to change behaviour such as 'nine out of ten people have already paid their taxes'. This nudge requires the respondent to understand what this phrase means. As well as following the norm, which might be relatively automatic, the taxpayers might also think about the likelihood of being caught and whether paying up rectifies this problem and which requires a conception about how payment systems work.

A lot of mental ground needs to be covered before some nudges can work. Consider for example the placement of healthy options next to the tills in cafeterias. The automatic nudge works like this: people are stimulated to buy because healthy foods are near the till. They have made their choices and are waiting to pay. The person sees the fruit and then must think: 'some fruit would be good for me; I will buy it and consume it later'. There is no benefit to people half-accidentally putting fruit on their trolleys and wondering why later! They need to understand their role in the system.

Commitment: a reflective process

In the health world, nudges to change health behaviour often require that the person in the trial has gone through a thought process about their health, as otherwise the trials would not have had the chance of working. Consider the commitment device (Thaler and Shefrin 1981). These are concrete and public commitments people make or are encouraged to make to do an action so as to commit themselves to it. Although the nudge operates through the psychological sense not wanting to go back on a promise to enter into commitment device requires some degree of thought and understanding of what a commitment device is in the first place. Someone duped into accepting a commitment device, without that process of reflection is likely to reject it further down the line.

Aspirational encouragement: kick-starting thinking

Another example of thought-provoking nudges is the work on aspirations to motivate people to make better choices, such as to go to university. Experimental research shows that people can be influenced by communication to make choices to attend university. One is a letter to the student from someone in university, which has an effect for attendance at elite universities (Sanders et al 2017). Silva et al (2016) found that role models, in the form of talks to students, work too. What is going on with these interventions? The student needs to think through a set of linkages that involves the idea that someone like them might attend university.

Personalization: a route to slow thinking

Personalizing nudges is a route to thinking. An example is included someone's name as part of a request to settle court fines (Haynes et al 2013). This might be regarded cynically as a ploy to make the citizen think that someone is taking a personal interest but in practice it could be a way to stimulate the person's interest and engagement with the problem, in that

the someone in officialdom is taking an interest in them. The general point is that a nudge that addresses you directly is working on your automatic, fast thinking reflex to pay attention but then is inevitably getting someone to commit to some reflection and conscious thought.

Directly encouraging slow thinking

An evaluation of crime re-education policies for poor youth in Chicago (Heller et al 2017) from three RCTs showed the programme Becoming a Man (BAM) program developed by the Chicago nonprofit Youth Guidance (YG) reduced total arrests during the intervention period by 28–35 per cent, reduced violent-crime arrests by 45–50 per cent, improved school engagement, increased graduation rates by 12–19 per cent, and reduced readmission rates to a correctional facility by 21 per cent. One key intervention involved getting participants to play a simulation game and the researchers conclude that the positive response they got was ‘suggestive support for the hypothesis that the programs work by helping youth slow down and reflect on whether their automatic thoughts and behaviours are well suited to the situation they are in, or whether the situation could be construed differently.’ (2017: 2). Recent work shows the influence of therapy-based interventions on social outcomes. Blattman et al (2017) have tested whether providing Cognitive Behavioural Therapy (CBT) would encourage better outcomes, in terms of crime and violence for unemployed youth in Liberia, which they found to have strong effects. There has been a more general interest in using ideas in CBT as a tool to increase awareness of people’s own behaviour changes, influencing initiatives called “mindfulness”, which can be taught and conveyed so as to achieve behaviour change, even targeted to policy-makers (see Lilley et al, 2014). What is interesting from the nudge plus perspective is the extent to which the behaviour changes come from measures that stimulate reflection and awareness.

Supporting true grit

In recent years, there has been considerable focus on what characteristics might be associated with long-term behaviour change, or self and societal benefiting behaviour. In the view of Duckworth et al (2007) it requires the development of an orientations akin to determination and playing for the long-term, what they call grit. In studies of health it requires having a mind-set to engage in change (Burd 2016). Though some of these characteristics might derive from genes or family context, the message from advocates of grit is that individual can consciously work at getting these advantages. This must involve some thinking and reflection on the part of the individual, even if the later actions might follow more automatically. Effective motivation is essential to behaviour change (see Michie et al 2011), and this underlying feature can only be promoted by reflection and consideration on the part of the individual.

Boost: Developing your capabilities

The boost claim is to support or nudge people where they need capacity to make decisions. In Hertwig's (2017) words, 'The goal of boosts is to make it easier for people to exercise their own agency in making choices.' Whereas in the past doctors tended to dispense their decisions on high for grateful patients to receive, in the days of consumer sovereignty patients get given choices between alternative courses of action, say between different treatments. But these choices require some understanding of statistics and it is easy to make simple mistakes. What Herwig suggests is giving patients information about the risk of different treatments expressed in natural frequencies rather than in conditional probabilities, so avoiding a need to understand Bayesian statistics. This training strategy has proved effective (Sedlmeier and Gigerenzer 2001), such as with students (Hoffrage et al 2000). Other examples include simple rules of thumb to interpret financial investment decisions for

retirement, or simple rules to follow for a diet. These interventions aim ‘to extend the decision-making competences of laypeople and professionals alike ... target the individual’s skills and knowledge, the available set of decision tools, or the environment in which decisions are made’ (Grüne-Yanoff and Hertwig 2016: 152).

Conclusions

The reformer of nudge policies needs to perform a balancing act. On one side, are the nudge advocates who are keen to show how their policies have transformed bureaucracies and provided better polices more attune to long-term citizen preferences. They can point to the success of nudge units and other behavioural public policy interventions. The expansion of these policies across jurisdictions suggests a rosy future for nudge as it finds new challenges and opportunities. On the other side, are the critics who see over claiming for small effects, a limited range of interventions and ethical dilemmas that have not been resolved. The challenge is to recognize some achievements from nudge but to take on board some of the criticisms too.

Our solution to the dilemma is to argue for a theoretical reframing of nudge policy. A range tweaks in practice or an expansion in the ambition of the interventions attempted will not deliver a policy approach that can escape from valid and powerful criticisms. There are flaws in the foundations of nudge policy that have to be addressed. There is no need for it to tie itself to the problematic concept of libertarian paternalism or to tie itself to claims of being a standalone policy. Like most public policy there is an element of paternalism in nudge interventions and legitimacy claims can rest as with other policies of processes of democratic approval rather than outlandish claims to preserve autonomy through allowing choice. Effectiveness in public policy usually involves a combination of governmental tools and nudge does not provide a path to avoid either standard financial instruments, various forms of

regulation or other, more subtle policy tools rather it is better understood as a way of honing the effectiveness of these tools.

We argue for different theoretical foundations for the nudge approach. We propose that the cognitive foundations of nudge recognize that citizens are not always cognitive misers but are also capable thinkers. Many effective nudges whether they admit it or not already work with citizen reflection and deliberation and we propose building on and using that wider cognitive palate for policymakers approaching citizens. Second, nudge was framed in a tradition of welfare economics where experts use that smart thinking to save the world. Like many before us in policy analysis we are skeptical about over-claiming from experts and technocrats. We offer another model for tackling social problems that is more in tune with the idea of liberal and open democracies and a self-steering society. We need nudge policy to be developed where citizens, public officials, and experts work together to design better ways to tackle problems (Evans and Terrey, 2016).

We offer nudge plus as an enhancement to the nudge policies. Nudge plus builds on the reflective component that is already implicit in many nudge policies. It encourages slow thinking at time, so that individuals can reflect on the messages that governments give them from time to time. There is a recognition that the nudger needs to design interventions with these long-term considerations in mind, such as giving citizens the boosts they need to make decisions, or personalizing nudges. These nudges are based on having a conversation between the citizen and those who represent the state and government, which acknowledges the democratic foundation of public policies and the autonomy this should entail. We provide a solution that builds on what has been achieved, but recognizes the powerful criticisms that have been made and seeks to address them, in ways that are practical and do not impose unreasonable costs upon the citizens, who are rightly concerned with leading a life fulfilling private objectives as well as ones that have more collective benefit. We would hope that

further debate about nudge plus policies will prompt their further adoption, in ways that might win over the critics of nudge, and develop more legitimacy and support for behavioural public policies in whatever context they are developed.

References

Anderson, Joel H. (2010), 'Review of Nudge: improving decisions about health, wealth, and happiness', *Economics and Philosophy*, 26: 369–406.

The Behavioural Insights Team (BIT)(2017) *Update Report 2016-17*

<http://www.behaviouralinsights.co.uk/publications/the-behavioural-insights-team-update-report-2016-17/>

Bhargava, Saurabh, and George Loewenstein (2015), 'Behavioral economics and public policy 102: beyond nudging', *American Economic Review*, 105(5): 396-401.

Brook Lyndhurst (2006), *Behaviour Change: A Series of Practical Guides for Policy-Makers and Practitioners, Number 4, Triggering Widespread Adoption of Sustainable Behaviour*, London: Defra.

Burd, Hannah (2016), 'Five factors for supporting people to take a more active role in health and wellbeing', Behavioural Insights Team blog,

<http://www.behaviouralinsights.co.uk/health/five-factors-for-supporting-people-to-take-a-more-active-role-in-health-and-wellbeing/>

Chetty, Raj, Adam Looney, and Kory Kroft. 2009. 'Salience and taxation: theory and evidence.' *American Economic Review*, 99(4): 1145-77.

Dobson, Andrew (2011), *Sustainability Citizenship*, Weymouth: Green House.

Dolan, Paul, and Matteo Galizzi (2015), 'Like ripples on a pond: Behavioral spillovers and their implications for research and policy', *Journal of Economic Psychology*, 47: 1-16.

Duckworth, Angela L., Christopher Peterson, Michael D. Matthews, and Dennis R. Kelly. 'Grit: perseverance and passion for long-term goals', *Journal of Personality and Social Psychology*, 92(6): 1087–110.

European Commission (2016), *Towards Applying Nudge Thinking to EU Policies*

- 15 Dec 2016 *Adopted* References: NAT/685 EESC-2016-1333Own-initiative,
Rapporteur: Thierry Libaert (Various interests - GR III / France)Plenary Session: 521 -
14 Dec 2016 - 15 Dec 2016.
- Evans, Mark and Terrey, Nina (2016) ‘Co-design with Citizens and Stakeholders’ in Gerry Stoker and Mark Evans (eds.) *Evidence-based Policymaking in the Social Sciences* Bristol: Policy Press
- Felsen, Gidon, Noah Castelo, and Peter B. Reiner (2013), ‘Decisional enhancement and autonomy: public attitudes towards overt and covert nudges’, *Judgment and Decision Making*, 8 (3): 202–213.
- Gigerenzer, Gerd. (2015). *Simply rational: Decision Making in the Real World*. New York: Oxford University Press
- Goodwin, Tom (2012), ‘Why we should reject ‘nudge’’, *Politics*, 32 (2): 85–92.
- Grüne-Yanoff, Till, and Ralph Hertwig (2016), ‘Nudge versus boost: How coherent are policy and theory?’, *Minds and Machines*, 26: 149–183.
- Hallsworth, Michael, D. Berry, Michael Sanders, A. Sallis, Dominic King, Ivo Vlaev, and A. Darzi (2015), ‘Stating appointment costs in SMS reminders reduces missed hospital appointments: findings from two randomized controlled trials’, *PLoS ONE*, 10 (9), e0141461.
- Halpern, David (2015), *Inside the Nudge Unit*. London: W. H. Allen.
- Halpern, David, and Danielle Mason (2015), ‘Radical incrementalism’, *Evaluation*, 21: 143-149.
- Haynes, Laura, Donald P. Green, Rory Gallagher, Peter John, and David J. Torgerson (2013), ‘Collection of delinquent fines: an adaptive randomized trial to assess the effectiveness of alternative text messages’, *Journal of Policy Analysis and Management*, 32: 718–730.

- Heller, Sara B., Anuj K. Shah, Jonathan Guryan, Jens Ludwig, Sendhil Mullainathan, and Harold A. Pollack (2017), 'Thinking, fast and slow? Some field experiments to reduce crime and dropout in Chicago', *Quarterly Journal of Economics*, 132 (1): 1-54.
- Hertwig, Ralph (2017), 'When to consider boosting: Some rules for policymakers', *Behavioural Public Policy*, 1 (2): 143-161.
- Hoffrage, Ulrich, Samuel Lindsey, Ralph Hertwig, and Gerd Gigerenzer (2000), 'Communicating statistical information', *Science*, 290, 5500, 2261-2262.
- House of Lords (2011), *Behaviour Change*, Science and Technology Select Committee 2nd Report of Session 2010–12, London: HMSO.
- Hoppe, Robert (1999) 'Policy analysis, science and politics: from 'speaking truth to power' to 'making sense together' *Science and Public Policy*, 26 (3): 201–210.
- John, Peter and Toby Blume (2017), 'Nudges that promote channel shift: a randomized evaluation of messages to encourage citizens to renew benefits online', *Internet and Policy*, published online.
- John, Peter, Smith, Graham, and Gerry Stoker (2009), 'Nudge nudge, think think: two strategies for changing civic behaviour', *The Political Quarterly*, 80: 361–370.
- John, Peter, Sarah Cotterill, Alice Moseley, Liz Richardson, Graham Smith, Gerry Stoker, and Corinne Wales (2011), *Nudge Nudge, Think Think: Experimenting with Ways to Change Civic Behaviour*, London: Bloomsbury Academic.
- Jones, Rhys, Jessica Pykett, and Mark Whitehead (2013), *Changing Behaviours On the Rise of the Psychological State*, Brighton: Edward Elgar.
- Jung, Janice Y. and Barbara A. Mellers (2016), 'American attitudes toward nudges', *Judgment and Decision Making*, 11 (1): 62-74.
- Kahneman, Daniel (2011), *Thinking, Fast and Slow*, London: Penguin.

- Kuklinski, James H., Paul J. Quirk, Jennifer Jerit, David Schwieder and Robert F. Rich (2000), 'Misinformation and the currency of democratic citizenship', *The Journal of Politics*, 62 (3): 790-816.
- Kruglanski, A. W. (1996), 'Goals as knowledge structures', in P. M. Gollwitzer & J. A. Bargh (Eds.), *The Psychology of Action: Linking Cognition and Motivation to Behavior*, New York: Guilford, pp. 599– 618.
- Lilley, Rachel, Mark Whitehead, Rachel Howell, Rhys Jones, and Jessica Pykett (2014), *Mindfulness Behaviour Change and Engagement in Public Policy An Evaluation*, http://www.sps.ed.ac.uk/_data/assets/pdf_file/0004/180787/MBCEPPreport.pdf, downloaded 1 May 2017.
- Lindblom, C (1990) *Inquiry and Change* New Haven: Yale University press
- Loewenstein, George., Bryce, C., Hagmann, D., & Rajpal, S. (2015), 'Warning: you are about to be nudged', *Behavioral Science & Policy*, 1(1), pp. 35–42.
- Lupia, Arthur, Mathew D. McCubbins, and Samuel L. Popkin (2000), *Elements of Reason Cognition, Choice, and the Bounds of Rationality*, Cambridge: Cambridge University Press.
- Marteau, Theresa M., Ogilvie, David, Roland, Martin, Suhrcke, Marc, and Kelly, Michael P. (2011), 'Judging nudging: can nudging improve population health?', *British Medical Journal*, 342: 263-265.
- Michie, Susan, Maartje M van Stralen, and Robert West (2011), 'The behaviour change wheel: a new method for characterising and designing behaviour change interventions', *Implementation Science*, 42. PMC. Web. 1 Dec. 2016.
- Mols, Frank, Haslam, S. Alexander, Jetten, Jolanda and Steffens, Niklas K. (2015), 'Why a nudge is not enough: a social identity critique of governance by stealth.' *European Journal of Political Research*, 54 1: 81-98.

Oliver, Adam (2013), 'From nudging to budging: using behavioural economics to inform public sector policy', *Journal of Social Policy*, 42 (4): 685-700.

Oliver, Adam (2017), *The Origins of Behavioural Public Policy*. Cambridge: Cambridge University Press.

Popkin, S. (1991), *The Reasoning Voter*. Chicago University Press.

Rebonato, Riccardo (2012), *Taking Liberties: A Critical Examination of Libertarian Paternalism*. Basingstoke: Palgrave Macmillan.

Reynolds, Katherine J, Emina Subašić, and Karen Tindall (2014), 'The problem of behaviour change: from social norms to an ingroup focus', *Social and Personality Psychology Compass* 1–12, 10.1111/spc3.12155.

Sanders, Michael, Raj Chande, and Eliza Selley (2017), *Encouraging People into University*, London: Department of Education.

Sedlmeier, Peter and Gerd Gigerenzer (2001), 'Teaching Bayesian reasoning in less than two hours', *Journal of Experimental Psychology: General*, 130, 380–400.

Silva, Antonio, Michael Sanders, and Aisling Ni Chonaire (2016), *Does the Heart Rule the Head? Economic and Emotional Incentives for University Attendance*, London: Behavioural Insights Team.

Simon, Herbert (1948), *Administrative Behaviour: A Study of the Decision Making Processes in Administrative Organisation*, New York: The Macmillan Co.

Stanovich Keith E. and Maggie E. Toplak M. E. (2012), 'Defining features versus incidental correlates of type 1 and type 2 processing', *Mind & Society*, 11, 3–13.

Sudgen, Robert (2011), *The Behavioural Economist and the Social Planner: to Whom should Behavioural Welfare Economics be Addressed?* Papers on Economics and Evolution are Evolutionary Economics Group, MPI Jena.

Sunstein, Cass R. (2014), *Simpler: The Future of Government*, Simon and Schuster.

Sunstein, Cass R. (2017), *Human Agency and Behavioral Economics Nudging Fast and Slow*, Cham, Switzerland: Palgrave Macmillan/Springer.

Thaler, Richard H. (2015) *Misbehaving: The Making of Behavioural Economics*, Allen Lane

Thaler, Richard H., and Cass R Sunstein (2008), *Nudge: Improving Decisions About Health, Wealth and Happiness*, New Haven: Yale University Press.

Thaler, Richard H and H. M. Shefrin, (1981), 'An economic theory of self-control,' *The Journal of Political Economy*, 392–406.

Wansink, Brian and Pierre Chandon (2006), 'Can "low-fat" nutrition labels lead to obesity?,' *Journal of Marketing Research*, 43 (4): 605-617.

World Bank (2015), *World Development Report 2015: Mind, Society, and Behavior*, Washington: World Bank.

Wilkinson, T. M. (2013), 'Nudging and manipulation', *Political Studies*, 61(2), 341-355.