



Foto: Anders Hviid

WHAT IS NUDGING?

Pelle Guldborg Hansen

PhD, Behavioural Scientist, Roskilde University, Denmark.

INTRODUCTION

Over the past four decades, advances in the behavioural sciences have revealed how human behaviour and decision-making is boundedly rational^[1], systematically biased, and strongly habitual owing to the interplay of psychological forces with what ought to be, from the perspective of rationality, irrelevant features of complex decision-making contexts. These behavioural insights teach us how contextual aspects of decision-making may systematically lead people to fail to act on well-informed preferences and thus fail to achieve their preferred ends. In the domain of public policy such advances may also teach us how neglecting these insights can be responsible for the failures of policies to reach intended effects and why paying more attention to them may provide the key for dealing more effectively with some of the main challenges modern societies and organizations face.

NUDGE

In their popular book *Nudge – Improving Decisions about Health, Wealth and Happiness* (2008),

ABOUT THE AUTHOR



Pelle Guldborg Hansen is a Behavioral Scientist at Roskilde University, Denmark and is Director of the Center for Science, Society and Policy co-funded by Roskilde University and University of Southern Denmark, Denmark. He also Heads The Danish Nudging Network and is Co-founder of TEN - The European Nudging Network. In addition he is the Chief Executive of iNudgeyou – The Applied Behavioural Science Group. Hansen's research interests include all theoretical as well as practical aspects of applied behavioral science, game theory of social convention and norms and the social psychology of information processing.

He has worked with real world applications of behavioral economics, especially so-called 'nudge'-interventions, within a wide range of arenas: from bank-mobility and conformity to tax regulation over organ-donation and street littering to registration processes within public administration and boarding of planes in Airports. He has also advised work in the OECD, The World Bank and for a number of European countries and institutions.

iNudgeyou – The Applied Behavioural Science Group:
www.inudgeyou.com

TEN – The European Nudging Network
www.tenudge.eu

The Danish Nudging Network
www.danishnudgingnetwork.dk

Richard Thaler and Cass Sunstein suggested that if a particular unfortunate behavioural or decision making pattern is the result of cognitive boundaries, biases, or habits, this pattern may be “nudged” toward a better option by integrating insights about the very same kind of boundaries, biases, and habits into the *choice architecture* surrounding the behaviour – i.e. the physical, social, and psychological aspects of the contexts that influence and in which our choices take place – in ways that promote a more preferred behaviour rather than obstruct it. In particular, they argue that such nudges may avoid some of the challenges and potential pitfalls of traditional regulation, such as costly procedures and ineffective campaigning, unintended effects of incentivising behaviours, and invasive choice regulation, such as bans. The advantage, they claim, of applying nudges is that public policy makers might thus supplement – or, perhaps, even replace (Thaler & Sunstein 2008, p. 14) – traditional regulation with nudges to influence people’s everyday choices and behaviours in cheaper, less invasive, and more effective ways. That is, nudging seems to offer policy makers an effective way to influence citizens’ behaviour without further restricting freedom of choice, imposing mandatory obligations, or introducing new taxations, or tax reliefs.

Thaler and Sunstein coined the seemingly oxymoronic term, *libertarian paternalism*, to characterize the attractive regulation paradigm that intuitively arises out of the nudge strategy to behavioural change in public policy making, when it is enacted to serve the interests of the citizens as these are judged by themselves, see (Hansen 2016). In their original definition – or rather characterization – of what a *nudge* is, the absence of traditional policy strategies is even invoked as a formal condition:

“A nudge, as we will use the term, is any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not.” (Thaler & Sunstein 2008, p. 6).

However, as I have later pointed out in *The*

Definition of Nudge and Libertarian Paternalism – Does the Hand fit the Glove? (2016) this way of defining a nudge easily conflates what is a descriptive behavioural concept with that of the separate political doctrine of libertarian paternalism. Instead we should define a nudge in a precise and consistent way relative to the behavioural sciences. In particular I suggest that we should adopt the following definition:

“A nudge is a function of (condition I) any attempt at influencing people’s judgment, choice or behaviour in a predictable way (condition a) that is motivated because of cognitive boundaries, biases, routines, and habits in individual and social decision-making posing barriers for people to perform rationally in their own self-declared interests, and which (condition b) works by making use of those boundaries, biases, routines, and habits as integral parts of such attempts.” (See Hansen 2016 for a discussion of this definition).

By this definition, the operational independence of nudges as to regulation is not a formal condition, but an implication. That is, the original definition of a nudge provided by Thaler and Sunstein (2008) is actually a consequence of the more fundamental definition provided here. This is an important point because it means that even though nudges can operate independently from regulation, they are not required to do so. Thus, a nudge may be combined with traditional regulatory approaches but works independently of the rational consequences of (a) forbidding or adding any rationally relevant choice options; (b) changing incentives, whether regarded in terms of time, trouble, social sanctions, economics, etc.; or (c) the provision of factual information and rational argumentation. The revised definition also help to make clear that nudges need not be used in the service of libertarian paternalism (think of marketing), but if applied in accordance with the reflected preferences of citizens do offer a central strategy to any libertarian paternalist (which also includes strategies that are not nudges, such as informational campaigns). Finally, this definition allows for a quite simple heuristic – noticed by Thaler and Sunstein themselves (Thaler & Sunstein 2008, p. 8)ⁱⁱⁱ – for characterizing and identifying aspects of choice architecture that functions as nudges: *a nudge is any part of choice architecture that*

should not effect behaviour in principle, but does so in practice (where by principle we mean according to standard economic theory). In fact, this simplifying characteristic of what a nudge is embodies the core insight driving behavioural economics.

NUDGING

At conferences, seminars and in teaching I am often asked the following: “Haven’t we always been nudging?” While it may be tempting to answer “yes” to this question as it leaves the audience (especially policy makers) feeling more comfortable it also leads directly to another question: “So if we have always been nudging, then, what’s new about it?”

Thus instead of answering “yes” I usually offer the following answer that relies upon making a conceptual distinction between ‘nudges’ and ‘nudging’, see also (Hansen, Skov & Skov 2016): a nudge is as defined above and we have always been using such attempts at influencing behaviour; but *nudging* is the systematic and evidence-based development and implementation of nudges in creating behaviour change. Thus, in this sense it is something new, and today it is this effort that is properly referred to as the field of ‘nudging’ and, as a discipline it is increasing in its influence on public policy and behaviour change strategies across the world.

A key institution in this development has been the establishment of the Behavioural Insights Team (BIT) – or the UK *Nudge Unit* as it is often referred to – in 2009 by UK Prime Minister David Cameron. It is led by Dr. David Halpern and Managing Director Owain Service and rolled out of government to become partly privatized in 2014. However, BIT is part of a broader trend, which since 2009 has seen nudge units, initiatives, and networks emerging in the United States, Denmark, Singapore, France and Canada, to mention just a few of the many exciting places this is happening. Likewise the OECD, The World Bank and the European Union, have published reports, held meetings, and actively supported research to further examine the potential of nudging, see (OECD 2014), (World Bank 2015) and (EU 2016). Taken together all of these efforts have led to the emergence of the field, yet nudging is only in its infancy.^[iii]

Still, it should be noticed that a common scientific framework of reference unites these efforts. In particular, nudging relies heavily on theories and methodology from behavioural economics as well as from cognitive and social psychology, using microeconomic decision theory as a baseline. In particular, a central focus within the field is the biases and heuristics program of Nobel prize winner Daniel Kahneman and Amos Tversky, which is rooted in dual-process theories of cognition and information processing (Kahneman & Tversky 1979) and made accessible to the wider public by Kahneman’s dual-system theory presented in his famous book *Thinking, Fast and Slow* (2011).

Dual-process theories vary greatly but generally share the overarching structure of positing two types of human information processing – automatic and non-automatic – in explaining and predicting human behaviour (Evans 2008). Using David Marr’s (1982) distinction between computational, algorithmic, and implementation-level theories of psychology, the explanatory function of dual process theories may be located at the algorithmic level of analysis where mental mechanisms that translate inputs into outputs are identified. Identifying processes according to the simplified distinction of whether they operate in an automatic and non-automatic fashion – i.e., (a) when there is conscious awareness, (b) when there is no goal to start the effort, (c) when cognitive resources are reduced, and (d) when there is no goal to alter or stop the process – these theories thus seek to explain how the supposedly irrelevant features of decision-making contexts systematically influence human decision making and behaviour, for a great brief introduction see (Gawronski, Sherman & Trope 2014).

In addition to the shared psychological underpinnings, the widespread efforts falling under the auspices of nudging are also unified by the ambition to advance and apply quantitative experimental approaches to field research. The choice (not the invention) of this methodological approach may be ascribed to the intellectual origins in the standard laboratory experiments used in behavioural economics. Randomized controlled trials (RCTs) are also explicitly formulated as the ideal in, for example, the BIT’s 2012 methodology report, *Test, Learn*

and Adapt (BIT 2012). However, it is important to stress that the objective of nudging is just as much about evaluating the efficacy and policy implications of nudge interventions and examining the potential real-world feasibility and applicability of behavioural insights as it is about extending the boundaries of scientific knowledge. Hence, the aspirations of nudging as currently carried out have much in common with what is usually referred to as real-world research, and the research relationship ideally pursued by stakeholders might best be characterized by a quote given by Hall & Hall (1996) (albeit in a different context):

“The research relationship is between equals, and is not exploitative: the client organization is not being “used” merely to develop academic theory or careers nor is the academic community being “used” (brains being picked). There is genuine exchange. The research is negotiated.”

ETHICS AND POLICY

Despite the various versions of this ideal being adopted by core practitioners of nudging, the cross-sectorial nature of current efforts has undoubtedly prompted some speculation and suspicion. One set of worries pertains to the threat of science being utilized by potentially biased policy makers to manipulate citizens. Another set of worries pertains to whether nudging is being used as an excuse to roll back traditional regulatory efforts. This latter worry has been most prominent in Europeans response to nudging; the US response has been worried more about the former critique pointing to the paternalistic aspects of the approach.

Fortunately, most of these concerns turn out to rely on pretty superficial readings of the scientific underpinnings of nudge theory, or on ignoring the challenges that face any attempt at regulating citizens’ behaviour, see (Hansen & Jespersen 2013).

First, nudges do not only rely on automatic processes, and automatic processes are not even necessarily ‘unconscious’ (by analogy: when a plane is on autopilot it does not imply that the pilot is unconscious or unaware of what is going on). Hence nudges and nudging is not characterized by psychological manipulation, as some critics would have it. Still, some nudges *do*

rely on non-transparent measures that transfer responsibilities to citizens in ways that should be regarded as manipulative and thus as illegitimate strategies of public policy in democratic systems (*ibid*). To this end it does not suffice to say that by principle nudges leave all choice-options from the original status quo available post-intervention since we are dealing with a paradigm that by its nature discards theoretical principle in favour of empirical practice. Instead we need to take the ethics of nudges seriously on a case-by-case basis since nudges comprise such a vast array of different measures that they cannot be evaluated as one.

Still, who should provide such evaluation? This leads to my second point with regard to the ethics and policy of nudging. While politicians may indeed be biased themselves the “who nudges the nudgers” critiques fail for at least two central reasons. One: *any* regulatory effort is directed by potentially biased politicians. Two: while nudges invoke insights about boundaries of rationality, biases, and habits into our choice architecture, *nudging* rests on approaches that comprise scientific state of the art methods for trying to detect and avoid such biases. Thus, it seems that nudges should be evaluated just as any other regulatory measure in a democratic system, although it will require expertise to be introduced to guide such evaluation – just as it is the case when it comes to economic and legal measures.

Finally, those who fear that applying nudging to public policy and other behavioural change challenges is just an excuse to roll back traditional regulatory efforts miss the central point of this essay. Nudging as well as nudges are fully compatible with and hence should be evaluated relative to standard regulatory measures. However, when it comes to the standards used for evaluating traditional regulatory measures aimed at changing behaviour, *nudging* may actually turn out to raise the bar quite substantially. Thus, nudging should be expected to change the way we do public policy making and delivery due to its introduction of scientific requirements by means of its evidence based standards. The implications, however, should not be characterized as a roll back, but as a shift of paradigm to what may be labelled *Behavioural Public Policy*.

Bibliography

- EU (2016) *Behavioural Insights Applied to Policy*, European Report 2016.
- Evans, J.S.B. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology* 59:255–78
- Gawronski, B., Sherman J.W. & Trope, Y. (2014) Two of what?: A Conceptual Analysis of Dual-Process Theories. In *Dual-Process Theories of the Social Mind*, pp. 3–19. New York: Guilford.
- Hall D, Hall I. 1996. *Practical Social Research: Project Work in the Community*. London: MacMillian
- Hansen, P.G. (2015) ‘Nudge and libertarian paternalism: Does the hand fit the glove?’ *European Journal of Risk Regulation* Vol. 1, no. 1, 155-174.
- Hansen, P.G. & Jespersen, A.M. (2013) ‘Nudge and the manipulation of choice: a framework for the responsible use of the nudge approach to behaviour change in public policy’. *European Journal of Risk Regulation* (1): 3–28.
- Haynes L, Goldacre B, Torgerson D. 2012. Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials. London: Cabinet Office – Behavioural Insights Team.
- Kahneman, D. (2011) *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux.
- Kahneman, D. & Tversky, A. (1979) Prospect theory: an analysis of decision under risk. *Econometrica*, Journal of Econometric Society, 47:263–91.
- Marr, D. (1982) *Vision: A Computational Investigation into the Human Representation and Processing of Visual Information*. San Francisco: Freeman.
- OECD / Lunn, P. (2014) *Regulatory Policy and Behavioural Economics*. Paris: OECD.
- Thaler, R.H, & Sunstein, C.R. (2008) *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.
- World Bank (2015) *World Development Report 2015: Mind, Society, and Behaviour*. Washington, DC: World Bank.

Notes

[i] I.e., the idea that rational decision-making is limited by the contextually available information, the cognitive limitations of the decision maker, and the time available to make the decision.

[ii] “... a nudge is any factor that significantly alters the behaviour of Humans, even though it would be ignored by Econs”, (Thaler and Sunstein 2008, p.8).

[iii] I am aware that I am only mentioning the top of the iceberg here and thus leaving out loads of interesting initiatives, groups and efforts. For a more comprehensive picture of all that is going on I invite you to visit the homepage of The European Nudging Network (www.tenudge.eu).

