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When the Nobel Prize goes pop Richard Thaler and the uncertain future of nudge Andrea Renda

Richard Thaler's contribution to behavioural economics has been seminal and path-breaking, but the actual impact of nudging has remained limited to specific applications, and appears particularly questionable in today's digital economy.

remember being caught by surprise when I read that the 79th Nobel Prize for Economics had been awarded to Richard Thaler. And that was not because I dislike Thaler's contribution to the literature of economics, which has been constant, massive, and extremely original since the 1970s.¹ Rather, this prize seems to be an *ex-post* add-on to the prize awarded in 2002, when Daniel Kahneman received the communication from Stockholm (together with Vernon Smith).² Indeed, Thaler had been a young co-author of Kahneman, who – without being an economist himself – brought a significant revolution by importing into the "dismal science" a number of breakthroughs from cognitive science.³ Important biases in human decision-making were uncovered by that stream of research, leading to the proliferation of follow-up applications in several fields, from the analysis of consumer consumption and contractual choices to behavioural finance, and eventually nudging as a way to gently steer individuals towards specific forms of behaviour by engaging in so-called "choice architecture". As a matter of fact, nudging was an inevitable by-product of that earlier research, as well as of earlier contributions "from within" economics, such as the early contributions of Maurice Allais against the "statute of rationality" in the 1950s; and from neuroscience (in particular, Herbert Simon also in the 1950s).⁴

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¹ See <u>https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2017/advanced-economicsciences2017.pdf</u> ² See https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2002/.

³ See D. Kahneman, J.L. Knetsch and R.H. Thaler (1986), "Fairness and the Assumptions of Economics", *Journal of Business*, 59:S285-S300; D. Kahneman, J.L. Knetsch and R.H. Thaler (1990), "Experimental Tests of the Endowment Effect and the Coase Theorem", *Journal of Political Economy*, 98:1325-1348; and D. Kahneman, J.L. Knetsch and R.H. Thaler (1991), "The Endowment Effect, Loss Aversion, and Status Quo Bias", *Journal of Economic Perspectives*, 5: 193-206.

⁴ See M. Allais (1953), "Le Comportement de l'Homme Rationnel devant le Risque: Critique des Postulats et Axiomes de l'École Americaine", *Econometrica*, 21:503-546 and H.A. Simon (1955), "A Behavioral Model of Rational Choice", *Quarterly Journal of Economics*, 69:99-118.

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Thaler's contribution to this stream of literature has been seminal, hard to overrate. Suffice it to think about the book <u>Nudge</u> he co-authored with Cass Sunstein, which became a best-seller in 2008 and one of the most quoted and influential books in social sciences in the past few years. The popularisation of behavioural economics in the form of relatively straightforward experiments paved the way for a successful age of direct implementation in policymaking, as testified to by Thaler's own involvement with the Behavioural Insights Team (<u>BIT</u>) and the creation of similar teams in many other governments, including the US. Thaler was the economic genius behind "nudge" as much as Cass Sunstein was the legal one. Barack Obama and David Cameron were enthusiastic followers. For the first time, policymakers were starting to acknowledge the relevance of choice architecture as a way to promote healthier decisions by individuals. It was, *de facto*, the consolidation of two fields of social science: marketing and public policy, where the former was convincingly applied to the latter. The same techniques that had been applied for decades by corporations to conquer end users' attention and willingness to pay were now being put to use in public policy, with a view to improving social welfare and policy effectiveness.

But nudging techniques, besides being hardly new, quickly also became controversial. First, whether "libertarian paternalism", as Cass Sunstein brilliantly dubbed the approach, is really not an oxymoron, is still subject to debate.⁵ At least two different forms of nudging have emerged over time: some nudges aim at helping individuals choose actions that are more desirable for themselves; whereas others steer individuals towards behaviour that is thought to be better for society, rather than for the individuals themselves.⁶ Examples of the first type include better signalling of health-related information on food products, the myplate.gov approach to indicating how to reach a balanced and healthy diet, opt-in privacy rules or behavioural approaches to individual decisions on retirement and savings. The second type includes opt-out schemes for organ donors, or the choice of default options that privilege sustainable solutions, inter alia in waste recycling. Conceptually, these are two different approaches: one aims at de-biasing individual decision-making, the other at steering individual decisions towards outcomes that are determined by government with no reference to the individual's own welfare. On the first one, Daniel Kahneman is probably the most influential contributor in the history of economics. The second is far more controversial: empirical literature reported by Sunstein himself revealed that "nudgees", those targeted by a given nudge, tend to be significantly affected only by the nudges they agree with, and in a related vein, "if people are told that they are being nudged, they will react adversely and resist". These aspects might affect the extent to which individual behaviour can be significantly steered away from its own path through nudging.

Moreover, the mere notion of "nudge" remained unclear over time, and ended up incorporating almost all forms of suggestion or assistance to individual decisions, including GPS navigation systems or speed humps, which seem to hardly fit the idea of choice architecture.⁷ And while significant results were shown by Sunstein and Thaler, and later by behavioural

⁷ See C.R. Sunstein (2014), "Nudging: A Very Short Guide", *Journal of Consumer Policy*, 37:583.



⁵ C.R. Sunstein and R.H. Thaler (2003), "Libertarian Paternalism Is Not an Oxymoron", *University of Chicago Law Review* 70:1159-1202. For a critique, see K. Yeung (2012), "Nudge as Fudge", *Modern Law Review*, 75: 122–148. doi:10.1111/j.1468-2230.2012.00893.x.

⁶ See, for an elaboration, A. Renda (2011), Law and Economics in the RIA World, Amsterdam: Intersentia.

insights teams in various countries for several experiments, the jury is still out on the effectiveness of these interventions in the longer term. For example, while in the short term modifying the order in which food is presented in a canteen might lead to increased consumption of healthy food over junk food, it is unclear whether individuals end up maintaining these new consumption choices over time, or simply learn where to find the food they wanted in the first place, thus neutralising the nudge. Similar findings have been highlighted in healthcare, for example in addressing obesity. In a few fields, including financial services and retirement plans, where punctual decisions are made today in view of a future outcome, behavioural economics has really shown it can make a difference.

Finally, with the advent of big data analytics and artificial intelligence, the possibilities for governments to nudge individuals by engaging in advanced choice (or code) architecture appear to be exponentially increasing. The use of automated decision processes and algorithms that provide suggestions to end users has proven to be extremely effective in nudging individuals in fields other than public policy (e.g. Netflix' own recommendation engine explains as much as 60% of the company's revenues). Applied in public policy, nudging can go "on steroids" in cyberspace, very often leading to uncontrolled policy outcomes and an excessive degree of end-user manipulation. Recently Karen Yeung, a Professor at King's College London, used the expression "hyper-nudges" to describe this phenomenon⁸. As Larry Lessig observed already in the late 1990s, in cyberspace "code, not law, determines what's possible"⁹: and code can embed countless nudges, making it difficult for end users to keep a sense of reality or independence in an entirely manipulated world. The whole debate on fake news, echo chambers and filter bubbles on the internet is dictated by the inevitability of nudging end users, whenever data-powered, AI-enabled algorithms are at stake. Suffice it to think about the recent US elections to find out how algorithms used online can polarise political opinions and shape entire elections.¹⁰

Summing up, the contribution that Richard Thaler has made to behavioural economics over the past several decades has been seminal, enlightening and path-breaking. But the contribution that behavioural economics and nudging have made to public policy is still unclear; and the application of nudging techniques in the digital economy today is creating more concerns than hope. Against this background, the hope is that the future evolution of behavioural insights will help shed light on how behavioural economics can be usefully employed in cyber policy, by transforming consumer protection and choice architecture into an exercise aimed at empowering end users. But isn't that exactly the opposite of (hyper-)nudging?

¹⁰ See e.g. the Wall Street Journal's "Blue feed, Red Feed", at <u>http://graphics.wsj.com/blue-feed-red-feed/</u>.



⁸ See K. Yeung (2017), "Hypernudge: Big Data as a mode of regulation by design", *Information Communication & Society*, Vol. 20, No. 1, 22.05.2016, pp. 118-136.

⁹ See L. Lessig (1999), *Code and Other Laws of Cyberspace*, Basic Books.