

A 2-page history of Behavioral Economics.

Iñaki Aliende

 0000-0002-5187-0044

Economist. Applied Economics Professor. Faculty of Statistical Studies, Complutense University of Madrid.

Abstract

This article summarizes the formation of Behavioral Economics (BE), such as it is known nowadays. It narrates the historical sequence, mentioning the accumulative contributions, without references to psychological sources, focusing on authors who tried to evaluate economic theory as a mean to make better social decisions. The author mainly argues three concepts to explain the contribution of BE (common wellness, bounded rationality and cognitive biases) in opposition to the classical framework and the theory of rational choice.

The arise of Behavioral Economics (BE) as an alternative approach to classical economics mainstream started when the theory of rational choice was questioned. While the concept of utility for the classic economics is foreseeable, rational and individual, BE introduced the concepts of common wellness, bounded rationality and cognitive biases, to explain the unorthodox agent's choice theory that BE represents.

The reformist utilitarianism of Jeremy Bentham (Bentham, 1789) and Stuart Mill (Mill, 1859), during the eighteenth and nineteenth centuries, argued a concept of collective utility that advocated the decisions in favour of common happiness, not only individual satisfaction (Kahneman et al., 1997). The work of Edwin Chadwick (Chadwick, 1842), fighting against the cholera, was the best example of the need of measurements and decisions to improve social welfare.

In the twentieth century, Katona (1951) stated that the perfect market conditions, portrayed by classical economics, only happens on rare occasions and that the context of decision is generally spontaneous and sentiment-dominant, instead of rational. The first ideas related to the importance of values and cognitive biases in the decisions of economic agents had already appeared with Adam Smith (Smith, 1759).

Tversky and Kahneman (1979) described in their prospect theory a decision sequence where heuristics produced by biases, like framing effect or loss aversion, play a key role in the end choice. They also identified other relevant biases in the decision process like representativeness, availability or anchoring (Aliende, 2020a). Unlike classical economics, prospect theory reveals that people decide based on the reference they have, and not maximizing the utility in a perfect market. For instance, if your close friends or your personal experience tell you that the usual price for a good is p_1 , that is the first price you will use as a reference to estimate expensiveness or cheapness, independently of the market price.

Simon is considered the first behavioralist honoured with a Nobel prize, in 1978. He projected a theory of choice based on an organizational context of asymmetric information, where the agents make decisions according to the limited options that they distinguish under human cognitive limitations (Simon, 1945). Thus, decision-makers will no more be “econs” but humans, in the words of Richard Thaler and Cass Sunstein, for whom the calculation of utility turns out to be much less rational than the classical economics would expect (Thaler and Sunstein, 2008).

Camerer and Loewenstein (2003) demonstrated, further the inaccuracy of classical assumptions, that BE was also able to make better predictions of field phenomena and suggest better policies.

Gary Becker, also merited with the Nobel prize, is considered a pioneer applying economic theory to a comprehensive field of topics related to human decisions and social issues (household, discrimination, crime, human capital or even organ donations) amplifying the object of economic studies to new territories. Nevertheless, he backed a rational choice position where the consumer counts on stable preferences and engage in maximizing behavior (Becker, 1964).

However, Kahneman and Tversky (1982, 1984) widely illustrated the importance of numerous biases and heuristics in people’s decisions that could be understood as unconscious ways of deciding.

Thaler and Sunstein (2008) introduced the distinction between cognitive system 1, or automatic, and cognitive system 2, or reflective. They argued that decisions frequently take place in system 1, where the person is primarily exposed to biases. These biases drive people to use heuristics to decide, instead of using the rational system 2. Kahneman (2011) will develop extensively the implications of these systems in the decision process and the consequences of heuristics to make flawed decisions.

Most decisions are made using system 1 which, inadvertently, guide us throughout the routine, avoiding dangers and following our habits (dressing up, walking on the streets, using the remote control, typing, browsing on the Internet, etc.) like an autopilot. However, we call System 2 thinking when rational decisions are required, such as solving a math problem, participating in a debate or managing changes.

Thaler and Sunstein (2008) added the concepts of choice architecture and nudge to BE’s framework. If decision-makers are subject to bounded rationality, biases and heuristics, then choice architects will have the opportunity to influence the person to find one option more attractive than others. They will be able to use nudges to leverage the heuristics to drive humans towards a right choice, which can be more beneficial than that if the person decides on their own. The logic of nudges applies, for example, when the supermarket draws a green arrow on the floor to guide you to the fresh food area. The excess of information in the shops (availability) and the omnipresent temptations of fast food and beverages (framing) could work as biases to miscarriage your best choice. However, a simple green path triggers your System 2 and reminds you about the importance of a healthy diet in your shopping cart.

In 2010, the first nudge unit was established in the UK, with the mission of applying behavioural science to public policy (Halpern, 2017). Many other similar institutions were created in countries and regional authorities around the world. Consequently, nudges open the door for libertarian paternalism (Thaler and Sunstein, 2008), a similar approach to utilitarianism (Kahneman et al., 1997), where the choice architects can model the context where decisions take place to obtain results more advantageous for the decision-maker and the rest of the society (Aliende, 2020b).

Moreover, they classify the nudges using the word as an acronym: iNcentives, Understand mapping, Defaults, Give feedback, Expect error and Structure complex choices. For example, when the administration recommends to citizens to save for their retirement, they can provide short-term fiscal benefits (incentives), implement calculators to estimate their future income (mapping), automatically opt-in employees for saving programs (defaults), inform periodically about their expected retirement fund balance (feedback), send reminders to all the 45 years-old citizens (expect error) or present three main options for them to save (structure).

In this way, they set up the basis of the behavioral architecture to intervene and provides an excellent tool for authorities to orientate the response of the people, whenever they are not coercive or costly, meeting the search for common wellness.

REFERENCES

- Aliende I. (2020a). Cognitive biases tool list. DOI: 10.13140/RG.2.2.32710.70727
- Aliende, I. (2020b). Choice Architects and Behavioral Economics: Creating a Common Framework to Enhance Research and Collaboration. *International Journal of Applied Behavioral Economics (IJABE)*, 9(4), 74-82.
- Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Bentham, J. (1789). Introduction to the Principles of Morals and Legislation.
- Camerer, C.F., Loewenstein, G. (2004). Behavioural economics: past, present, future. In: Camerer, C.F., Loewenstein, G., Rabin, M. (Eds.), *Advances in Behavioral Economics* (pp. 3–51 of chapter 1). Princeton University Press, Princeton, NJ.
- Chadwick, E. (1842). Report to Her Majesty's principal secretary of state for the Home Department, from the Poor Law Commissioners on an inquiry into the sanitary condition of the labouring population of Great Britain: with appendices. W. Clowes and sons.
- Halpern, D. (2015). Inside the nudge unit: How small changes can make a big difference. Random House.
- Kahneman D., & Tversky A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 363-391.
- Kahneman D., Tversky A. (1982). Judgment Under Uncertainty: Heuristics and Biases. *Science*, 185(4157): 38-55. <https://doi.org/10.1017/CBO9780511809477.002>
- Kahneman D., Tversky A. (1984). Choices, Values and Frames. *American Psychologist*, 39(4): 341-350. <https://doi.org/10.1037//0003-066X.39.4.341>

- Kahneman D., Wakker P., Sarin R. (1997). Back to Bentham? Explorations of Experienced Utility. *The Quarterly Journal of Economics*, 112 (2): 375–406. <https://doi.org/10.1162/003355397555235>
- Kahneman, D. (2011). *Thinking, fast and slow*. Macmillan.
- Katona, G. (1951). *Psychological analysis of economic behavior*.
- Mill, J. S. (1859). A few words on non-intervention. *Fraser's magazine*, 60(360), 766-776.
- OECD (2019). “Behavioural insights”. Retrieved from <https://www.oecd.org/gov/regulatory-policy/behavioural-insights.htm>
- Simon H. A. (1955). A Behavioral Model of Rational Choice. *The Quarterly Journal of Economics*, 69(1), 99–118.
- Simon, H. A. (1945). *Theory of Games and Economic Behavior*.
- Smith, A. (1759). *The Theory of Moral Sentiments*. McMaster University Archive for the History of Economic Thought.
- Thaler R., & Sunstein C. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Yale University Press.