FRAMING CHOICES TO INFLUENCE BEHAVIORS: A DEBATE ON THE PROS AND CONS OF "NUDGING"

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ABSTRACT

In recent years, a viable alternative to the traditional "legislate-and-sanction" approach has been sustained: an approach of libertarian-paternalism through behavior incentives/disincentives defined as *nudges* (Thaler & Sunstein 2009). Nudging is a way of guiding behavior based not on legal provisions with explicit sanctions, but rather on codes, practices or regulations that place the individual in the best conditions to make a good choice for himself and for society. Such alternative forms to traditional regulation would also lower the cost of controlling social behavior. Nudge is described as a gentle manipulation, based on empirical evidence, of the frame of individual decision-making architecture, aiming to overcome the moralistic paternalism of legislation. There have been also criticisms of this approach, such as the accusation of hidden paternalism, exemplified by messages on cigarette packets, considered by some as explicitly manipulating, and hence strangers to a loyal relationship between regulators and regulated. In other cases, it has been argued that nudging operates an occult redistribution of wealth from irrational to rational subjects. In this work, I intend to discuss critically, from the microsociological and cognitive point of view, the potentialities and problematic aspects of nudging.

KEYWORDS

Nudge, regulation, behavioral sciences, cognitive biases

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1. Introduction – 2. Defining the scope of "nudges" – 3. Criticisms against the nudge concept – 4. In conclusion: A possible compromise point.

1. Introduction

Richard Thaler, along with Cass Sunstein, a jurist, a few years ago introduced the successful idea of "nudging" (THALER, SUNSTEIN 2009) in order to promote a new style of regulation inspired by a philosophy of "libertarian paternalism" (THALER, SUNSTEIN 2003). Nudging lies outside the traditional "command and control" attitude to regulation, but it also does not entail wholesale deregulation: it seeks to guide human behavior by leveraging biases and heuristics that characterize the way individuals gather information and make decisions. Nudges intervene and guide decisions when the instinctual decision-making system (system 1) prevails over the properly rational system (system 2) (KAHNEMAN 2011). In this way, nudging can become an alternative to other forms of traditional regulation, in such a way as to lower the cost of channeling social behaviors (BALDWIN 2014, 831).

As a term of art, the verb *nudge* is used in policymaking in its commonly recognized meaning where the idea is to "gently push" or "elbow" someone into doing something, through an exhortation they can easily and intuitively understand and appreciate. The point of nudging, in other words, is to guide the behavior of individuals without violating their freedom of choice. In order to convey this idea, Thaler and Sunstein (THALER, SUNSTEIN 2009, 5 f.) introduce the example of a school canteen whose policy is to improve the students' eating habits, and to this end, instead of banning or eliminating junk food, the staff places the healthier food at eye-height (THALER, SUNSTEIN 2009). For widespread examples of nudging, we can point to the nutrition facts label that is mandatory for certain foods, the tobacco packaging warning messages, or opt-out social security plans (SUNSTEIN 2017, 19).

When it comes to encouraging socially desirable behavior through better information, it is not advisable to tell someone that they are more virtuous than average, because their behavior will end up getting worse (THALER, SUNSTEIN 2009, 74). Thus, for example, people seem more willing to pay the taxes they owe when they are informed that a good percentage of other people regularly pay their own taxes and do not incur any fines, but not when they are informed about the way their taxes are used, or about penalties for tax violations, or about what further assistance is provided for filling their tax returns. Likewise, voter turnout generally does not increase by lamenting the fact that it is low (THALER, SUNSTEIN 2009, 72). The delimitation of nudges seems to be of particular interest in health care and social care, where the decisions that individuals make now not only affect their personal wellbeing in the future but have major implications for public spending.

To qualify as such, a *nudge* measure should not imply significant material incentives or disincentives: levying taxes, offering subsidies, or depriving persons of their freedom cannot be considered a nudge (SUNSTEIN 2015, 512). Nudges work because they provide information effectively, because they make certain choices easy, or simply because they leverage individual inertia. In several cases, nudges seem to work by leveraging a cognitive bias. But choices can also be influenced by making information available when no bias is at work (so long as we take it that ignorance itself is not a bias) (SUNSTEIN 2015, 513). Nudges aim to provide a decision-making architecture based on empirical evidence, and to overcome the moralistic paternalism inherent in much legislation.

The paternalistic route ignores biases that cause harm to oneself and implements harsh penalties for biased behavior that harms others. But this should be no longer an acceptable choice for governments. In this article, I will first try to summarize the current definition and scope of the "nudge", which is still being debated and redefined, by referring to its political-philosophical assumptions defined by the authors as *libertarian paternalism* (par. 2). In the second part, I will focus on the most convincing criticisms of the nudge idea (paragraph 3), and then I will try to reach a balanced conclusion on the subject (paragraph 4).

2. Defining the scope of "nudges"

It is only in a relatively recent past that question of the interaction between cognition and human behavior came into its own as an object of sustained study (KAHNEMAN, TVERSKY 1974; KAHNEMAN, TVERSKY 2000), at which point policymakers also began to take a fresh look at science as a source of guidance in regulating society. Considering the cost and varying degree of effectiveness of traditional regulation based on threats and punishments, it may now seem appropriate to consider the alternatives. The issue is actually older than it seems if we consider that the first cognitivist in the broad sense is Hume (HUME 1739). Social scientists who focus their investigations on the legal system are now integrating the insights coming from psychology, ethology and neuroscience, by increasingly carrying out theoretical and empirical investigations into the impact that human's animal nature has on normative social practices (BECKSTROM 1989;

FROLIK et. al. 1999; GOODENOUGH, PREHN 2006; GOODENOUGH, TUCKER 2010; GRUTER 1979; JONES 2006; JONES, GOLDSMITH 2005). In particular, the nineteenthcentury formalistic concept of rationality is not the only, nor perhaps the main parameter, by which to evaluate why human societies have norms, or the reason why people respect or violate these norms (SACCO 2015).

When legislative committees seek expert opinions in the process of drafting a bill, they used to turn to economists, jurists, sociologists, life scientists, and so on. These committees are now supported by agencies or units mainly composed of behavioral scientists. Among the first and best-known examples are the Behavioral Insights Team (BIT) in the U.K. and the U.S. government's Social and Behavioral Sciences Team. It has been recently estimated that in some fiftyone countries, the behavioral sciences have an official policymaking role. The trend has also taken hold in the international arena, considering that the World Bank and the United Nations would like to apply the principles of behavioral science to sustainability and development policies, for example in the effort to fight corruption. In its latest annual report, the U.K.'s Behavioral Insights Team claims that it has reduced the flow of patients sent to overcrowded hospitals, has limited unnecessary gas consumption, and has reduced the number of speeding tickets, while increasing the ratio of disadvantaged students admitted to prestigious universities and the number of workers enrolling in voluntary retirement plans. Circumscribed applications of the nudge concept have been analyzed in specific fields like freedom of contract (MATHIS, BURRI 2016), consumer protection (RANGONE 2012), organ donation (DEN HARTOGH 2013), financial investments (HELLERINGER 2016; TERESZKIEWICZ 2016), and dispute resolution (WATKINS 2010).

By changing the choice-framing architecture with nudges, that is, by shaping the frame through which choices are presented, it should be possible to achieve results that are less socially problematic. The structuring of options seems more effective in situations where individuals have no feedback as to the outcome of their actions or where the effects of choices are deferred over time (THALER, SUNSTEIN 2009, 83 f.). An effective strategy in this respect is to set default options that one must be able to get rid of in a very simple way. Two examples are organ donation and enrolment in voluntary social security plans: in most jurisdictions, these are choices that require express consent, and not surprisingly, these behaviors are not as common as we want them to be.

If we could presume these virtuous choices, we would be able to significantly improve outcomes simply by making it possible to opt out with a mere statement. Other effective illustrations of nudges are the default setting on computers, mobile phones, and GPS navigators (SUNSTEIN 2017, 1). These setting can be used to guide and direct behavior while ultimately giving individuals the freedom to bypass them. They are "institutional prosthetics" that can save lives, as in the case

of the parallel road stripes perpendicular to the flow of traffic: they give drivers the impression that they are driving faster than is actually the case, thereby inducing them to slow down (TROUT 2005, 427).

The rationale behind nudging, and the reason why Thaler and Sunstein chose for it the oxymoronic label "libertarian paternalism", is that they are not meant to replace traditional regulation but to complement it, in such a way as to preserve each citizen's agency and control. Liberal paternalism is an attempt to devise "third way" (GIDDENS 1998). In the midst of a polarizing public debate, nudges seek common ground in the kind of gradual reform that may appeal across a broad political spectrum (AMIR, LOBEL 2008, 2118). Contrary to nudging, "command and control" regulation and total deregulation often entail, in equal measure, a drastic overhaul of the existing framework, and so they end up with measures that are either outright coercive or fully libertarian (SUNSTEIN 2000). The idea that legislative intervention should be gradual and noninvasive, while recognizing that people sometimes act in self-damaging ways, has been expressed in various forms. One description is "paternalistic", sometimes qualified, as in asymmetric paternalism (WHITMAN, RIZZO 2015, 410), and another one is "debiasing through law" (JOLLS, SUNSTEIN 2004).

As the previous discussion may have suggested, nudging seems to ultimately manipulate our will without our being able to realize it. An effort has therefore been made to understand how it might be received across different cultures, and it seems to have a strong reception in most countries, with similar patterns found in the United States, Canada, Australia, the United Kingdom, Germany, France, and Italy (SUNSTEIN 2017, 17). Sweden has been observed to be more receptive to it than the United States, and it has been speculated that this may well have to do with Sweden's national culture of wide support for government intervention (HAGMAN et. al. 2015, 449). Slightly lower levels of acceptance have been recorded in Denmark, Hungary, and Japan, while acceptance in Italy and the United Kingdom is high compared to other European countries (with the exception of "sweets free" cashier zones in supermarkets in Italy) (SUNSTEIN 2017, 34). Nowhere in the world does nudging find greater acceptance than in China and Korea (SUNSTEIN 2017, 18). Acceptance of nudging does not seem to vary with demographic, but gender does seem to be a factor, women generally being more in favor of it than men (SUNSTEIN 2017, 36).

A significant difference affecting nudge evaluation was linked to the nudge's educative potential. Noneducative nudges are constructed by reframing choices without making people better informed: they rely on the instinctive decision-making system, as they play on people's fears or hopes (SUNSTEIN 2017, 7). Information-giving or educative nudges tend to win greater acceptance, but there is also remarkable variance from case to case, depending on how effective the nudge is (SUNSTEIN 2017, 9). In short, whether a nudge will find favor depends

not so much on its abstract proposition as on how effective it proves to be in practice.

3. Criticisms against the nudge concept

As suggested, the idea of exploiting biases and heuristics to achieve socially optimal results is certainly subject to objection. Two mains lines of criticism have developed, each with its own range of views: on the one hand we have the political and ideological criticism that object to the underlying philosophy of libertarian paternalism; on the other hand, we have the psychological-cognitive criticism that challenges the validity of the cognitive bias theory or its practical use as a criterion on which basis to tweak regulation.

In the first camp we find critics who argue that there is little in libertarian paternalism that is actually libertarian and much that is manipulative. Thus Baldwin (BALDWIN 2014) has highlighted some forms of nudging that, instead of relying on a requirement to keep the public informed about its object or on the inertia that causes us to cling to default rules, conceals a paternalistic approach that leverages our emotions. These are characterized by Baldwin as "third degree" nudges, the prime example being the fear-inspiring labelling on cigarette packaging, considered to be explicitly manipulative: for this reason, and because there is no opt-out, this kind of nudging can be said to break the trust between regulators and the public (BALDWIN 2014, 836). When these measures are taken directly by administrative agencies, without the public debate that accompanies the legislative process, nudging could even be a form of "disrespectful social control" (HAUSMAN, WELCH 2010, 134). Similarly, Mitchell (MITCHELL 2015, 1247 f.) argues that nudging is ultimately a form of paternalism in disguise, particularly when designed for wealth redistribution, for the underlying assumption is that the wealth is redistributed from rational individuals to irrational ones.

As several critics have also pointed out, nudging assumes that decision-making bias only affects the people being nudged, not the people who are doing the nudging. Nudge theory, in other words, seems to imply the existence of a benevolent and rational public official in charge of nudging, but where is this rational being to be found? (NISKANEN 1971). There is no reason why government action should be immune from the same cognitive errors as individual action (LODGE, WEGRICH 2016, 253): it, too, is subject to the constraints of "bounded rationality" (SIMON 1958). The anarchy and messiness of government decisionmaking have been widely underscored in the literature, where government is compared to a "garbage bin" from which good plans and measures can get discarded and then recovered by mere accident or for the wrong reasons (COHEN et al. 1972). Libertarian paternalism is argued to be in some ways a violation of the libertarian and individualistic principle of value neutrality (AMIR, LOBEL 2008, 2120; STEFFEN 2016, 84). In the same vein, nudging has been described as "welfarist" (GUALA MITTONE 2015, 386). Likewise, and also in seeming contradiction to the principles of libertarian paternalism itself, some nudging has been described as pro-social, one example being the nudging designed to promote recycling, another the opt-out rules that by default allocate part of an individual's income to charity. These measures are "epistemologically different" from pro-self nudges (HAGMAN et al. 2015, 441), which are only designed to help us make better choices in our own self-interest. This would make pro-self nudging less intrusive than pro-social nudging, and therefore more acceptable.

The second line of criticism is the psychological, with several authors challenging the theory of systematic cognitive bias (ARROW et al. 1995; KAHNEMAN, TVERSKY 1974; KAHNEMAN, TVERSKY 2000). Here Gigerenzer (GIGERENZER 2015) raises a number of objections that point out the inconsistencies in the very concept of cognitive bias, and he subscribes to the notion that when people are well informed and have been educated about a subject, they will make fewer irrational choices. But the main problem with libertarian paternalism, according to Gigerenzer, is that it implicitly places all blame on the individual, while ignoring that institutions may have a vested interest in diverting individual behavior in one way or another. This objection takes issue not with nudging itself but with its use as a convenient shortcut that is taken in place of the longer and more resource-intensive route of educating those we want to nudge (GIGERENZER 2015, 363). Although nudges are to be credited for making bureaucrats aware of the psychological factors at work in the decisionmaking process, they can become an excuse for not adequately protecting the rights of people who need such protection, like consumers, and coercively enforcing such rights when needed. Gigerenzer also notes that the definition of nudging has become confusing, even at the hands of its own creators, who initially excluded from the concept any measure that works by providing material or monetary incentives, but then stretched the same concept to include such measures within its scope (while qualifying this extension of scope by requiring that the incentive needs to be small).

From the point of view of behavioral psychology, Gigerenzer argues that the kind of cognitive psychology and behavioral economics at work in the libertarian paternalism of nudging (MATHIS, TOR 2016) proceeds from a caricaturized view of human nature and individual intelligence as irremediably error-prone. On the contrary, he maintains, it is premature to be pessimist about the difficulty of debiasing: with adequate visual and numerical support, even children can be educated about risk and uncertainty (GIGERENZER 2015, 364). According to Rachlinski (RACHLINSKI 2002, 1212) we need not even resort to nudging as a remedy against cognitive errors: "simple experience" will suffice. In fact, the

evidence that we are systematically irrational is far from conclusive, for it based on tests which use particularly restrictive rules of logic, and which therefore is do not accurately capture the "ecological nature" of rationality.

These tests are selectively reported through a "confirmation bias" that has virtually eliminated any contrary evidence. The cognitive biases the libertarian paternalists refer to are therefore unsystematic, rather than systematic (GIGERENZER 2015, 371). And in any case, the "errors" rooted in natural heuristics (availability, overconfidence, hindsight, self-serving reasoning, framing, status quo, anchoring, and adjustment) would not necessarily be worse than other logical or statistical models presented as rational. Then, too, it is not just in cognitive psychology that we seem to cherry-pick the evidence for a fundamental irrationality: the problem is endemic across all the social sciences. In fact, the suspicion is that the published research finding that we are prone to systematic cognitive error actually represents only a small percentage of the total. The vast majority of research remains unpublished in the drawer (this is known as the file-drawer problem), precisely because it does not show any error, and so it does not point to an original discovery. This is a long-debated problem in science, where research that lacks visibility, because unoriginal or "uninteresting", may offer evidence that some otherwise wellestablished hypothesis is false, and that the null hypothesis is true. In fact the argument has been made that we should have publications specifically devoted to research that does not prove anything new (and some years ago a Journal of Articles in Support of the Null Hypothesis was launched).

This kind of research is also necessary if science is to get rid of false scientific hypotheses that might otherwise survive until somebody accidentally "proves" them, perhaps using processes that cannot be replicated. By the authors' own admission, the experiments carried out to prove that our decision-making heuristics are fundamentally irrational were misleading by their very construction, for they did not reflect the real conditions in which decisions are made (MITCHELL 2002, 1973). Indeed, the research that has been left in the drawer may prove that most people in most cases are capable of deciding in a substantially rational manner (MITCHELL 2002, 1966 f.).

According to Gigerenzer, the dualistic model of reasoning (system 1 vs. system 2) discovered by cognitive psychologists achieves clarity at the cost of oversimplification: even Freud's threepronged model (based on ego, superego, and es) looks more sophisticated than the dualistic system. We would probably fare better by investing resources to educate people about risk, as early as possible, and in any case before they begin to adopt risky behaviors (GIGERENZER 2015, 379). Educational measures would help to alert individuals to the existence of framing or other socio-psychological factors that influence our decisions (LECOUTEUX 2015, 407).

4. In conclusion: A possible compromise point

Nudges have always existed in some form, and the fact that they are now being debated so intensely perhaps testifies to an availability bias that may be at work in the debate on the nature and purpose of legislation. Never has such a wideranging assortment of rules, laws, and regulations been grouped under a single category, making it the target of criticism it might otherwise never have attracted. Gigerenzer reports an interesting example that regards voluntary screening for breast cancer. In some countries, women over the age of fifty receive a letter of invitation to show up for a voluntary mammography at a set date and time. Over a ten-year course, this screening reduces the mortality rate from five women in 1,000 to four. In the letter, this difference is reported as a risk reduction of over 20 percent, often raised to 30 percent to make it more convincing (GIGERENZER 2015, 362). There is no doubt, therefore, that here we have an instance of manipulation based on statistical framing. Equally beyond doubt, however, is that the value of saving that single human life justifies the cost of sending 1,000 letters, and also the time that healthy women devote to screening.

Also questionable is Mitchell's assertion (MITCHELL 2015) that nudges would, unbeknownst to us, redistribute wealth from people who are more rational to ones who are less so. Even if irrational people are induced to eat healthier, this does not necessarily mean that they will eat less: the outcome may well be a rise in prices at the canteen, at the expense of the rational people who eat less.

It is true, however, that rules requiring information to be made available to consumers may entail additional costs, taking up more administrative time and resources. These costs are also borne by rational choosers, but as long as they remain low, the social burden is probably acceptable. Even the costs of illness and bad eating habits end up falling in part on society. And Hagman's (HAGMAN 2015) distinction between pro-social and pro-self nudges seems fictitious: nudges that apparently are pro-self may, in the aggregate, wind up making for greater social utility.

In response to some of these objections, Mills (MILLS 2015) suggests adopting three criteria that nudging needs to meet if it is to be respectful of personal autonomy: it has to be (1) consistent with the authentic goals of a mature individual; (2) easily avoidable; and (3) adequately advertised and easily recognizable for what it is. At least three types of nudges would meet this standard: personalized default rules, choice prompts (provided that they do not become overwhelming), and the provision of "framed information" (MILLS 2015, 502). Also in response to the same objections, Wilkinson (WILKINSON 2013) suggests making a distinction between manipulative and nonmanipulative nudges, but he concludes that this distinction is actually quite difficult to make, and that it is more productive to ensure an effective opt-out that is not merely formal, and therefore very simple to achieve.

Furthermore, even when nudges are not framed as rational methods of persuasion, they can still be used in two ways. First, they can call attention to a problem or provide information about a choice that we will have to make in one way or another (such as deciding whether or not to smoke), but here they work only so long as (a) the choice is presented at the beginning of the decision-making process, (b) the information can be easily recognized, and (c) it is not intended to shock or disturb but is nonetheless clear in its persuasive intent. Second, they can be used to support someone whose autonomy is compromised, like subjects who is unable to correct cognitive errors (SAWICKI 2016, 212). These criteria would exclude subliminal messages, for example, or the very graphic images that are now standard on packets of cigarettes, but they would allow placing cigarettes out of prominence in retail, while giving visual prominence to devices intended to help us stop smoking (SAWICKI 2016, 222).

A further criterion by which to justify the use of nudges lies in the process through which they are created: if the process is legislative, the nudge will have greater justification, because this means that it was subjected to a level of public scrutiny it would not have received under a non-legislative procedure, whose outcome would accordingly not be easily recognizable. Such a nudge would thus be liable to criticism as a device that could undermine an individual's capacity for autonomous decision-making (LEPENIES, MAŁECKA 2015, 435).

Sunstein's final answer to some of these objections is that autonomy would not be endangered even with nudges that do not set out to achieve their objective by informing and educating. These nudges free up two of the scarcest resources we have today, namely, cognitive energy and time (SUNSTEIN 2014). This overrides most critical arguments, on the basis that to compel a choice on technical issues is to engage in paternalism. In fact, the only possible alternative would consist in imposing a legal obligation, thereby transforming the nudge into a coercive norm of the conventional type (SUNSTEIN 2017, 89). It may be advisable, then, to rely on a system that is similar to what happens when deciding how we want a software application to work, that is, when we are asked to deliberately choose whether we want to keep the default settings - as laid down by a superior and enlightened body whose judgment we decide to trust, because we do not feel competent enough in the matter at hand or we do not have the time needed to figure out what is best for us - or whether we want to customize these settings ourselves and in detail. This option could be termed "simplified active choosing". Libertarian paternalism, then, will be acceptable when instead of requiring us to make choices it promotes these choices (SUNSTEIN 2017, 106).

It is still too early to say whether nudging can be abandoned for something better or better-sounding. Policies promoting nudges recognize that regulation is multifaceted: it faces a range of different problems today, and so it needs to be able to deploy a range of different tools. Nudging is therefore not a conceptually strict formula but a pliant tool, so much so that it has sometimes been stretched excessively, becoming a victim of its own success. In this respect, its creators have accepted the risk of not promptly intervening to narrow down the concept. The debate we looked at in outline does not solve the fundamental disagreement on the issue, whose sticking point lies in the proper understanding of individual autonomy and collective welfare, and what the boundary and interaction between them is.

Regardless of how those issues are worked out, however, it is clear that nudging can help regulation pragmatically address the need to take account of the different cognitive abilities of individuals (RACHLINSKI 1982, 126). So, too, on two points I would strongly agree with the authors who developed the concept: they note that nudging is unavoidable, because there is no way to avoid the choice architecture, and hence the framing; and they also note that there is no such thing as a neutral frame, for which reason it is necessary to always be aware of the frame within which a nudge is designed, while also making sure that the framing process is open, in such a way that the frame is clear to everyone and is open to revision. I believe this is already a possibility, at least to the extent that the rights, interests, protections, and principles we want to secure - such as health, savings, education, and an adequate standard of living - are explicitly stated and ranked in a constitutional charter. Nudging should therefore not be considered an exception to "constitutionally based decision making" (FREY, GALLUS 2016, 18), nor is it inconsistent with democracy, because even when the constitution does not provide the blueprint needed to design a proper nudge, there is nothing about a nudge that should prevent us from looking to other authoritative sources when designing one, or from making the design process open and public.

References

- AMIR O., LOBEL O. 2008. Stumble, Predict, Nudge: How Behavioral Economics Informs Law and Policy, in «Columbia Law Review», 108, 2008, 2098 ff.
- ARROW K., MNOOKIN R.H., ROSS L., TVERSKY A., WILSON R. (eds.) 1995. Barriers to Conflict Resolution, New York-London, W.W. Norton & Company, 1995.
- BALDWIN R. 2014. From Regulation to Behaviour Change: Giving Nudge the Third Degree, in «The Modern Law Review», 77, 6, 2014, 831 ff.
- BECKSTROM J.H. 1989. Evolutionary Jurisprudence. Prospects and Limitations on the Use of Modern Darwinism throughout the Legal Process, Chicago-Urbana, University of Illinois Press, 1989.
- COHEN M.D., MARCH J.G., OLSEN J.P. 1972. A Garbage Can Model of Organizational Choice, in «Administrative Science Quarterly», 17, 1, 1972, 1 ff.
- DEN HARTOGH G. 2013. The Political Obligation To Donate Organs, in «Ratio Juris», 26, 3, 2013, 378 ff.
- FELSEN G., REINER P. 2015. What can Neuroscience Contribute to the Debate Over Nudging?, in «Review of Philosophy and Psychology», 6, 3, 2015, 469 ff.
- FREY B.S., GALLUS J. 2016. Beneficial and Exploitative Nudges, in MATHIS K., TOR A. (eds.), Nudging Possibilities, Limitations and Applications in European Law and Economics, Cham-Heidelberg-New York-Dordrecht-London, Springer, 2016, 11 ff.
- FROLIK L.A., FIKENTSCHER W., DIEKER G. (eds.) 1999. Law & Evolutionary Biology. Selected Essays in Honor of Margaret Gruter on her 80ty Birthday, Portola Valley, Gruter Institute for Law and Behavioral Research, 1999.
- GIDDENS A. 1998. The Third Way. The Renewal of Social Democracy, Cambridge, Polity Press, 1998.
- GIGERENZER G. 2015. On the Supposed Evidence for Libertarian Paternalism, in «Review of Philosophy and Psychology», 6, 3, 2015, 361 ff.
- GOODENOUGH O.R., PREHN K. 2006. A neuroscientific approach to normative judgment in law and justice, in ZEKI S., GOODENOUGH O.R. (eds.), Law and the Brain, Oxford, Oxford University Press, 2006, 77 ff.
- GOODENOUGH O.R., TUCKER M. 2010. Law and Cognitive Neuroscience, in «Annual Review of Law and Social Science», 6, 1, 2010, 61 ff.
- GRUTER M. 1979. The Origins of Legal Behavior, in «Journal of Social and Biological Structures», 2, 1, 1979, 43 ff.
- GUALA F., MITTONE L. 2015. A Political Justification of Nudging, in «Review of Philosophy and Psychology», 6, 3, 2015, 385 ff.

- HAGMAN W., ANDERSSON D., VÄSTFJÄLL D., TINGHÖG G. 2015. Public Views on Policies Involving Nudges, in «Review of Philosophy and Psychology», 6, 3, 2015, 439 ff.
- HAUSMAN D.M., WELCH B. 2010. Debate: To Nudge or Not to Nudge, in «Journal of Political Philosophy», 18, 1, 2010, 123 ff.
- HELLERINGER G. 2016. Designing Disclosures. Testing the Efficacy of Disclosure in Retail Investment Advice, in MATHIS K., TOR A. (eds.), Nudging - Possibilities, Limitations and Applications in European Law and Economics, Cham-Heidelberg-New York-Dordrecht-London, Springer, 2016, 153 ff.
- HUME D. 1739. A Treatise of Human Nature, Oxford, Clarendon Press, 1968.
- JOLLS C., SUNSTEIN C.R. 2004. Debiasing through Law, J.M. Olin, Law & Economics Working Paper 225, 2004, 1 ff.
- JONES O.D. 2006. Law, evolution and the brain: applications and open questions, in ZEKI S., GOODENOUGH O.R. (eds.), Law and the Brain, Oxford, Oxford University Press, 2006, 57 ff.
- JONES O.D., GOLDSMITH T.H. 2005. Law and Behavioral Biology, in «Columbia Law Review», 105, 2005, 405 ff.
- KAHNEMAN D. 2011. Thinking, Fast and Slow, New York, Farrar, Straus and Giroux, 2011.
- KAHNEMAN D., TVERSKY A. 1974. Judgment under Uncertainty: Heuristics and Biases, in «Science», 185, 4157, 1974, 1124 ff.
- KAHNEMAN D., TVERSKY A. 2000. Prospect Theory. An Analysis of Decision under Risk, in KAHNEMAN D., TVERSKY A. (eds.), Choices, Values, and Frames, Cambridge, Cambridge University Press, 2000, 17 ff.
- LECOUTEUX G. 2015. In Search of Lost Nudges, in «Review of Philosophy and Psychology», 6, 3, 2015, 397 ff.
- LEPENIES R., MAŁECKA M. 2015. The Institutional Consequences of Nudging Nudges, Politics, and the Law, in «Review of Philosophy and Psychology», 6, 3, 2015, 427 ff.
- LODGE M., WEGRICH K. 2016. The Rationality Paradox of Nudge: Rational Tools of Government in a World of Bounded Rationality, in «Law & Policy», 3, 3, 2016, 250 ff.
- MATHIS K., BURRI P.A. 2016. Nudging in Swiss Contract Law? An Analysis of Nonmandatory Default Rules from a Legal, Economic and Behavioral Perspective, in MATHIS K., TOR A. (eds.), Nudging - Possibilities, Limitations and Applications in European Law and Economics, Cham-Heidelberg-New York-Dordrecht-London, Springer, 2016, 121 ff.

- MATHIS K., TOR A. (eds.) 2016. Nudging Possibilities, Limitations and Applications in European Law and Economics, Cham-Heidelberg-New York-Dordrecht-London, Springer, 2016.
- MILLS C. 2015. The Heteronomy of Choice Architecture, in «Review of Philosophy and Psychology», 6, 3, 2015, 495 ff.
- MITCHELL G. 2002. Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law, in «William and Mary Law Review», 43, 5, 2002, 1907 ff.
- MITCHELL G. 2015. Libertarian Paternalism Is An Oxymoron, in «Northwestern University Law Review», 99, 3, 1245 ff.
- NISKANEN W.A. 1971. Bureaucracy and Representative Government, Chicago IL, Aldine-Atherton, 1971.
- RACHLINSKI J.J. 1982. Cognitive Errors, Individual Differences, and Paternalism, in BROOKS-GORDON B., FREEMAN M. (eds.), Law and Psychology, Oxford, Oxford University Press, 1982, 125 ff.
- RACHLINSKI J.J. 2002. The Uncertain Psychological Case for Paternalism, in «Northwestern University Law Review», 97, 2002, 1165 ff.
- RANGONE N. 2012. Errori cognitivi e scelte di regolazione, in «Analisi Giuridica dell'Economia», 1, 2012, 7 ff.
- SACCO R. 2015. Il diritto muto, Bologna, Il Mulino, 2015.
- SAWICKI N.N. 2016. Ethical Limitations on the State's Use of Arational Persuasion, in «Law & Policy», 38, 3, 2016, 211 ff.
- SIMON H.A. 1958. Il comportamento amministrativo, Bologna, Il Mulino, 1958.
- STEFFEN A.D. 2016. Judging is Nudging: The Inevitability of Value Judgments. Consequences of the Collapse of the Fact/Value Dichotomy for the Behavioural Law and Economics, in MATHIS K., TOR A. (eds.), Nudging - Possibilities, Limitations and Applications in European Law and Economics, Cham-Heidelberg-New York-Dordrecht-London, Springer, 2016, 69 ff.
- SUNSTEIN C.R. 2000. Deliberative Trouble Why Groups Go to Extremes, in «Yale Law Journal», 110, 2000,71 ff.
- SUNSTEIN C.R. 2014. Choosing Not to Choose, in «Duke Law Journal», 64, 1, 2014, 52 ff.
- SUNSTEIN C.R. 2015. Nudges, Agency, and Abstraction: A Reply to Critics, in «Review of Philosophy and Psychology», 6, 3, 2015, 511 ff.
- SUNSTEIN C.R. 2017. Human Agency and Behavioral Economics: Nudging Fast and Slow, London, Palgrave Macmillan, 2017.
- TERESZKIEWICZ P. 2016. Neutral Third-Party Counselling as Nudge Toward Safer Financial Products? The Case of Risky Mortgage Loan Contracts, in MATHIS K.,

TOR A. (eds.), Nudging - Possibilities, Limitations and Applications in European Law and Economics, Cham-Heidelberg-New York-Dordrecht-London, Springer, 2016, 169 ff.

- THALER R.H., SUNSTEIN C.R. 2003. Libertarian Paternalism, in «The American Economic Review», 93, 2, 2003, 175 ff.
- THALER R.H., SUNSTEIN C.R. 2009. Nudge. Improving Decisions About Health, Wealth and Happyness, London, Penguin Books, 2009.
- TROUT J.D. 2005. Paternalism and Cognitive Bias, in «Law and Philosophy», 24, 4, 2005, 393 ff.
- WATKINS D. 2010. A Nudge to Mediate: How Adjustments in Choice Architecture Can Lead to Better Dispute Resolution Decisions, in «The American Journal of Mediation», 10, 2010, 1 ff.
- WHITMAN D.G., RIZZO M.J. 2015. The Problematic Welfare Standards of Behavioral Paternalism, in «Review of Philosophy and Psychology», 6, 3, 2015, 409 ff.
- WILKINSON T.M. 2013. Nudging and Manipulation, in «Political Studies», 61, 2, 2013, 341 ff.