

## STUMBLE, PREDICT, NUDGE: HOW BEHAVIORAL ECONOMICS INFORMS LAW AND POLICY

NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS. By Richard H. Thaler and Cass R. Sunstein. New Haven: Yale University Press, 2008. Pp. 293. \$26.00.

PREDICTABLY IRRATIONAL: THE HIDDEN FORCES THAT SHAPE OUR DECISIONS. By Dan Ariely. New York: HarperCollins, 2008. Pp. 280. \$25.95.

*On Amir\**  
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*Research in the field of behavioral economics indicates that humans stumble in their decisionmaking in predictable ways that can often be corrected by a gentle nudge from the appropriate regulatory authority. Two new books—Dan Ariely’s Predictably Irrational and Richard Thaler and Cass Sunstein’s Nudge—recount the findings of behavioral research on predictable patterns in human decisionmaking and lay the foundation for regulation through choice architecture that recognizes these human stumbles. In this Review Essay, we provide a critical account of remaining gaps in behavioral economics research and suggest that some types of behavioral insights may be better translated into law and policy reforms than others. We further argue that Nudge’s concept of “libertarian paternalism” both understates and exaggerates the jurisprudential and policy implications of regulatory innovation. While key insights from the behavioral field may lead to effective regulation systems with minimal intervention, these systems entail costs, have distributional effects, solve macro coordination problems, and are inevitably value driven. Moreover, policy nudges serve merely as a first stage of sequenced regulation where, inevitably, more coercive measures are required in later stages. The idea of choice architecture is then related to the growing body of regulatory studies collectively termed “new governance.” We conclude with a call for a more nuanced account of the range of mechanisms as well as the limits, costs, and consequences of applying lessons from the field of behavioral economics to law.*

### INTRODUCTION

To stumble is human. With every choice we make, individual motivation interacts with emotions, cognition, and social norms. Our decision-making stumbles are often the result of the ways in which information is presented and choices are constructed before us. Finding patterns of how we stumble and designing systems that can prevent common behavioral failures is the subject of the new field of behavioral economics which

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attempts to incorporate the vast knowledge accumulated by cognitive and social scientists into predictive models. The legal community in recent years has focused on creating policies that take into account the limits of human rationality. To do so, law has turned to developments in social science research because, as Richard Epstein recently wrote, “There is little doubt that the major new theoretical approach to law and economics in the past two decades does not come from either of these two fields. Instead it comes from the adjacent discipline of cognitive psychology, which has now morphed into behavioral economics.”<sup>1</sup>

By understanding the ways in which individuals are susceptible to biases and flawed decisionmaking, law and policy can help improve individual and group behavior. Two new books—Dan Ariely’s *Predictably Irrational* and Richard Thaler and Cass Sunstein’s *Nudge*—bring together some of the most significant new research on human fallibility and lay the foundation for laws and policies that reflect an understanding of where humans stumble.

The two books present the field of behavioral studies at its best and illuminate the many questions that remain unanswered. The rich and diverse examples are the result of years of research to identify patterns of human divergence from the rational agent model. Taking on a broad range of daily life contexts, the books both demonstrate the limits of means-end rationality and explain some of the features of behavioral biases. *Predictably Irrational* and *Nudge* thus elucidate the systematic and pervasive nature of irrationality and can inform policy in every legal field, ranging from consumer and environmental protection, through employment and health policies, to tax and financial regulation. Moreover, the insights in the books can inform decisionmaking processes in general and may have implications for the work of adjudicators, legislators, and administrators. The two books are a call for policymakers to systematically study and correct for fallibilities in individual and group choices.

This Review Essay links the two books to current developments in legal theory and practice, highlighting the scholarly and programmatic efforts to rethink the role of law for the twenty-first century. Part I of this Review Essay sets forth the main arguments developed in each of the books and examines both the concrete and conceptual implications that follow from the field of behavioral economics. Part II discusses the idea of debiasing through law, exploring various policy choices that flow from the experiments described in the two books. The books share optimism about the ability of strategic design to increase rational living, thereby improving overall welfare. We aim to provide a critical account of what is still lacking in the experimental field and which types of behavioral insights are best translated into law and policy reforms. We also develop a distinction between Type 1 biases, which are sourced in our automatic

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1. Richard A. Epstein, *The Neoclassical Economics of Consumer Contracts*, 92 *Minn. L. Rev.* 803, 803 (2008).

systems and stem from reflexive or intuitive processes, and Type 2 biases, which are generated from irrationalities in the reflective system meant to override our automatic responses, and argue that cognitive errors are more readily corrected through policy when sourced in Type 1 biases.

Moving to the jurisprudential implications of debiasing lessons, Part III analyzes the vision of gentle “nudges” and the concept of “choice architecture,” the idea that law should focus on the organization of the context, process, and environment in which individuals make decisions. We argue that these concepts are closely related to a growing body of regulatory studies that can be grouped under the label “new governance” and fall between command-and-control regulation and deregulated markets.<sup>2</sup> Part III also analyzes Thaler and Sunstein’s concept of “libertarian paternalism.”<sup>3</sup> We support the authors’ call for a “third-way” mode of government intervention, between command-and-control and deregulation in the broad range of social and fiscal policy. We also accept as real their distinction between gentle nudges and forceful shoves, and consider it key to liberal theory. At the same time, we view the term “libertarian paternalism” and its substance as conceptually and normatively problematic. We argue that, in an effort to appeal to a broad political audience, *Nudge* simultaneously overclaims and understates the implications of behavioral economics for law and policy. Many of the key implications of the behavioral field involve designing more effective and less interventionist regulation systems than command-and-control, but these systems cannot be described as *libertarian*. They too entail costs, have distributional effects, and are inevitably value driven. Similarly, many of *Nudge*’s proposals can be explained by better regulatory responses to third-party externalities and the need for central coordination, planning, and macropolicies rather than *paternalist* goals.

Moreover, because of the limits of the corrective solutions to cognitive failures as well as competing interests that coexist in any given policy field, it is important to identify those challenges that cannot be addressed by new governance approaches and will continue to require more traditional regulatory approaches. Frequently, policy nudges serve as a first stage of sequenced regulation where, inevitably, more coercive measures are required in later stages. A more nuanced account of the range of mechanisms as well as the limits, costs, and consequences of debiasing

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2. For a discussion of the emergence of the “new governance” paradigm in regulatory theory and practice, see generally Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 *Minn. L. Rev.* 342 (2004) [hereinafter Lobel, *Renew Deal*].

3. As will be further elaborated in Part III, “libertarian paternalism” refers to the idea that law can be formulated as default rules which use behavioral insights to help individuals reach their preferred choices, while allowing them to maintain the freedom to make their own choices, including mistakes, by an opt-out. Sunstein and Thaler first developed the idea of “libertarian paternalism” in their article, Cass R. Sunstein & Richard H. Thaler, *Libertarian Paternalism Is Not an Oxymoron*, 70 *U. Chi. L. Rev.* 1159 (2003), and expanded on the concept in *Nudge* (pp. 4–6).

efforts would strengthen *Nudge's* theoretical, explanatory, and practical power.

## I. PREDICTING AND NUDGING

### A. *The Odd World of Judgment and Decisionmaking*

Humans stumble frequently because we are rather bad at predicting what will make us happy.<sup>4</sup> Moreover, principled ideas about our desires and preferences are often at odds with our immediate choices. *Predictably Irrational*, by Professor Dan Ariely of MIT's Sloan School of Management, is a tour de force analysis of the field of judgment and decisionmaking. The book presents the latest social science research on the various forces that drive irrational decisionmaking in predictable patterns and is rich with concrete examples of how individuals make poor decisions. Ariely shows that the context in which we appraise choice alternatives, from shopping choices (pp. 14–15), through the selection of housing alternatives (pp. 30–31) and potential mates (pp. 10–14), to judgments about the severity of a crime (pp. 224–26), has an immense influence over the choice outcome. The experiments described in the book demonstrate that the strong effects of context go beyond what is reasonable, beneficial, or adaptive, and that individuals often have very little awareness of these effects (p. 243).<sup>5</sup> It appears, in some instances, we are simply hardwired to stumble.

*Predictably Irrational* takes its readers on a whirlwind of demonstrations pertaining to fallacies of supply and demand, and more broadly, to why people are unable to generate “true” prices for experiences, which can lead to the failure of the efficient markets hypothesis. In contrast to behavior suggested by classic notions of a direct relationship between value or utility and monetary amounts, individuals actually use different types of information to generate seemingly interchangeable judgments. Ariely describes research he has performed with colleagues showing that people are unable to ignore the actual price of a good when considering

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4. See Daniel Gilbert, *Stumbling on Happiness* 230–32 (2006) [hereinafter Gilbert, *Stumbling*] (describing difficulty people have in assessing impact of various events on their overall happiness); Jeremy A. Blumenthal, *Law and the Emotions: The Problems of Affective Forecasting*, 80 *Ind. L.J.* 155, 166, 184–85 (2005) (noting that although people may be able to predict whether a future event will evoke a positive or negative response, they usually cannot accurately predict the duration and intensity of these emotions, and finding that these inaccuracies interfere with jurors' ability to fairly compensate tort victims).

5. For research with similar results, see Joel Huber et al., *Adding Asymmetrically Dominated Alternatives: Violations of Regularity and the Similarity Hypothesis*, 9 *J. Consumer Res.* 90, 90 (1982) (finding “times when profitability of a product line can be increased by adding a (dominated) alternative that virtually no one ever chooses”); Itamar Simonson, *Choice Based on Reasons: The Case of Attraction and Compromise Effects*, 16 *J. Consumer Res.* 158, 170–72 (1989) [hereinafter Simonson, *Choice*] (discussing role of compromise and attraction effects in choices which diverge from predicted choices based on expected utility).

the maximum price they are willing to pay for the good (their reservation price) (pp. 23–48).<sup>6</sup> One’s reservation price should theoretically be independent of the actual price and correspond solely to the utility level (or the value) one hopes to gain by consuming the good. Yet, Ariely and colleagues found that even when it is in people’s best interest to reveal their true reservation price (i.e., the price elicitation procedure is incentive compatible<sup>7</sup>), they are still affected by the actual price of the good (p. 28). Thus people do not act as the economic model would predict, but instead, use other strategies to make their pricing decisions.

In particular, people base utility predictions on experiential cues, but use external market information for monetary assessments (pp. 23–48).<sup>8</sup> Using different cues to determine one’s pricing, either on the demand or the supply side, is not necessarily wrong, but may indeed lead to an unforeseen dependency between supply and demand. For example, the standard way to consider the optimal price of a monopolist has to do with the intersection of the supply curve (assumed to reflect various costs and capacities of production) with the demand curve (assumed to reflect the true value consumers might extract from the good). If the psychology of consumers is such that the “value” they extract from the good depends on its price, markets may become inefficient with either overdemand for high-priced goods or underdemand for low-priced goods. In essence, Ariely notes, the basic assumptions underlying the supply and demand model may not hold true in real life (p. 45).

Several other experiments also illustrate the human tendency toward irrational valuation. For example, Ariely found a placebo effect based on the price of drugs; consumers who bought cold medicine at discount prices reported significantly worse medical outcomes than those who

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6. For a detailed explanation of this research, see Nina Mazar, Dan Ariely & Botond Kőszegi, *Incentive Compatibility? Setting Reservation Prices via the Becker-DeGroot-Marschak (BDM) Procedure* (undated) (unpublished manuscript, on file with the *Columbia Law Review*); see also On Amir, Dan Ariely & Ziv Carmon, *The Dissociation Between Monetary Assessments and Predicted Utility*, 27 *Marketing Sci.* (forthcoming 2008) (manuscript at 2, 5–11, on file with the *Columbia Law Review*) [hereinafter Amir et al., *Dissociation*] (proposing that dissociation between monetary assessment and predicted utility is due to focus on different aspects of the transaction for each assessment); Nina Mazar, Botond Kőszegi & Dan Ariely, *Price-Sensitive Preferences* 8–12, 18 (Mar. 17, 2008) (unpublished manuscript, on file with the *Columbia Law Review*) (demonstrating “consumer preferences are often inferred exactly from how consumers react to different prices”).

7. Incentive compatibility refers to a situation in which a subject has an incentive to exhibit her real behavior and preferences—that is, the setup of the experimental incentives is compatible to that of the “real world” situation. For a mathematical discussion of incentive compatible procedures, see generally Gordon M. Becker et al., *Measuring Utility by a Single-Response Sequential Method*, 9 *Behav. Sci.* 226 (1964).

8. See Amir et al., *Dissociation*, *supra* note 6, at 13. They note: “Monetary assessments heavily reflect transaction cues (variables relating to the transaction in which the purchase alternative may be acquired or forgone), insufficiently reflecting experience cues (variables relating to the experience of owning or consuming the purchase alternative) that inform predicted utility.” *Id.*

paid list price (pp. 181–84).<sup>9</sup> While placebo effects have long been shown to be pervasive,<sup>10</sup> findings of pricing effects on physical ailments are relatively new.<sup>11</sup> More generally, Ariely describes a series of studies in which he and his colleagues demonstrate a strong top-down effect of expectation on experience (pp. 157–68). If one expects to taste something bad, the actual experience will be worse than if there had been no biased expectation. Recently, the connection between expectations and experience has been demonstrated at the neural level as well.<sup>12</sup>

Another bias that affects rational pricing is the endowment effect.<sup>13</sup> Robust market inefficiency is caused by the effect of ownership on individual valuing of an item. Ownership causes individuals to request far more money when selling an item than nonowners are willing to pay. Again, while this behavioral bias is not a new finding, Ariely and his colleagues have further developed our understanding of the endowment ef-

9. See also Baba Shiv et al., Placebo Effects of Marketing Actions: Consumers May Get What They Pay For, 42 *J. Marketing Res.* 383, 391 (2005) (finding “price affects not only perceived quality but also . . . the actual efficacy of the product”).

10. Credible placebos can help relieve and sometimes even cure physical and mental ills. See, e.g., Laura Bienenfeld et al., The Placebo Effect in Cardiovascular Disease, 132 *Am. Heart J.* 1207, 1210–16 (1996) (noting placebo effect in cardiovascular disease); Irving Kirsch & Guy Sapirstein, Listening to Prozac but Hearing Placebo: A Meta-Analysis of Antidepressant Medication, *in* *How Expectancies Shape Experience* 303, 314–16 (Irving Kirsch ed., 1999) (discussing placebo effect in treating depression); Guy H. Montgomery & Irving Kirsch, Mechanisms of Placebo Pain Reduction: An Empirical Investigation, 7 *Psychol. Sci.* 174, 175 (1996) (describing effect of placebos on pain). Placebo effects have also been detected with functional magnetic resonance imaging. See Tor D. Wager, Placebo-Induced Changes in fMRI in the Anticipation and Experience of Pain, 303 *Science* 1662, 1662–64 (2004) (finding placebo effects account for both lower reported pain and reduced activity in pain processing areas of the brain).

11. Incidentally, despite increasing evidence about the robustness of placebo effects, the American Medical Association has recently issued an opinion against the use of placebos for clinical purposes. See Adam J. Kolber, A Limited Defense of Clinical Placebo Deception, 26 *Yale L. & Pol’y Rev.* 75, 75–78 (2007) (arguing that “given current knowledge of placebo effects and patient preferences, we should not categorically prohibit the deceptive use of placebos”).

12. See Hilke Plassmann et al., Orbitofrontal Cortex Encodes Willingness to Pay in Everyday Economic Transactions, 27 *J. Neuroscience* 9984, 9987–88 (2007) (demonstrating activity in medial orbitofrontal cortex which encodes people’s willingness to pay “during simple economic transactions”).

13. This effect was originally coined by Richard Thaler as the “underweighting of opportunity costs.” Richard Thaler, Toward a Positive Theory of Consumer Choice, 1 *J. Econ. Behav. & Org.* 39, 44 (1980). Daniel Kahneman, Jack Knetsch, and Richard Thaler later studied the effect experimentally. Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, Experimental Tests of the Endowment Effect and the Coase Theorem, 98 *J. Pol. Econ.* 1325 (1990) (discussing experiments demonstrating that “endowment effect” persists even in market settings with opportunities to learn). This endowment effect is robust but has been recently qualified to pertain mainly to goods not meant for exchange. That is, a shop owner would not exhibit an endowment effect for the goods in the store, just like people do not exhibit this effect for money. See Nathan Novemsky & Daniel Kahneman, The Boundaries of Loss Aversion, 42 *J. Marketing Res.* 119, 123 (2005) (concluding there is no loss aversion in routine transactions).

fect. They demonstrate that ownership causes sellers to focus on the benefits of possession (e.g., how nice it might look on the shelf) while buyers seem to focus on the available alternatives given the price or the opportunity costs of the purchase (pp. 127–38).<sup>14</sup> The pricing disparity that results from the endowment effect causes less trade in the market than what might otherwise be efficient.

In addition to pricing irrationalities, *Predictably Irrational* discusses a broad range of social behavior, human interactions, and identity formation. In a series of experiments, Ariely examines seemingly irrational behavior surrounding dishonesty. For example, an average person allows herself to steal office supplies or communal food, but will not steal the equivalent value of the items in cash (pp. 195–97). Ariely seeks evidence about the workings of the human conscience and demonstrates that dishonest behavior is influenced by internal checks much more than by an external cost-benefit ratio.<sup>15</sup> One experiment demonstrates, for example, that in order to curb cheating on an exam, it may be more efficient to manipulate the salience of one's standards of honest conduct than to manipulate the probability of being caught (pp. 211–14). Conversely, introducing a medium (such as poker chips) that enables people to distance themselves from their dishonesty and to rationalize it as not pertaining to their honest identity may greatly increase such dishonesty (pp. 220–22).

A final important area of human fallibility illuminated in *Predictably Irrational* is that of self-control. In a series of experiments conducted by Ariely and collaborators, individuals consistently underpredicted their interest in unusual sexual activities and their willingness to engage in unsafe sex in an aroused state (pp. 96–97). While the notion of hot and cold states in decisionmaking is not new,<sup>16</sup> the empathy gap found by

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14. See Ziv Carmon & Dan Ariely, Focusing on the Forgone: How Value Can Appear So Different to Buyers and Sellers, 27 J. Consumer Res. 360, 368 (2000) (“Specifically, buyers and sellers focus on aspects of the exchange associated with what they will forgo and differ both in the attention they pay to attributes of the evaluated item and in how they evaluate what they notice.” (citation omitted)).

15. The set of experiments presented by Ariely does not deal with extremely high gains from dishonesty. For those, it is likely that people might be very willing to sacrifice their self-concept. However, the insensitivity to external costs and benefits holds at least for the cost-benefit levels examined by Ariely. See Nina Mazar, On Amir & Dan Ariely, The Dishonesty of Honest People: A Theory of Self-Concept Maintenance, 45 J. Marketing Res. (forthcoming Dec. 2008) (manuscript at 3, on file with the *Columbia Law Review*) [hereinafter Mazar et al., Dishonesty] (“[S]elf-concept maintenance . . . allows people to engage to some level in dishonest behavior, thereby benefiting from external benefits of dishonesty, while maintaining their positive view about themselves in terms of being honest individuals.”).

16. Previous research has demonstrated hot-cold empathy gaps across several emotional states. See Daniel T. Gilbert et al., The Future Is Now: Temporal Correction in Affective Forecasting, 88 Organizational Behav. & Hum. Decision Processes 430, 435–36, 438–40 (2002) (discussing impact of hunger on food purchase preferences); George Loewenstein et al., The Effect of Sexual Arousal on Expectations of Sexual Forcefulness, 34 J. Res. Crime & Delinquency 443, 463 (1997) (finding sexually aroused men are “more

Ariely and colleagues, that is, the inability of people in one state to comprehend how it might feel in another state, is cause for alarm, as policy does not regularly anticipate and correct for behavior in hot states. In other words, neither our intuition nor the common practice market research does a good enough job capturing the judgments people will make when in a hot state. For example, Ariely's results suggest that market research will mistakenly indicate that most individuals plan to use condoms when in real life hot states they will not do so (pp. 96–97). This may lead educators and policymakers astray when they consider investment in education about condom use. Tax dollars might be more wisely used in offsetting such problems of self-control.

Above and beyond highlighting a range of heuristics, mental shortcuts, and biases that affect our cognitive processes in daily life, *Predictably Irrational* attempts to outline the systematic causes of such erroneous judgments, opening the door to potential remedies for these failings. Research suggests, for example, that signing an honor code can bring forth awareness of, or “prime,” individual standards of honesty and can curb subsequent dishonesty.<sup>17</sup> The concrete examples as well as the broader processes analyzed in the book are thought-provoking and relevant to most any field of law. *Predictably Irrational's* focus on economic- and policy-relevant behaviors, as well as its choice of empirical situations that pertain to well functioning markets, organizations, and societies uniquely positions the analysis for legal discourse.

### B. *Helping Humans Improve Their Judgment*

*Predictably Irrational* sets the stage for *Nudge*, the highly anticipated product of a longtime collaboration between Richard Thaler and Cass Sunstein. Like Ariely, Thaler—described in the academy as the founder of behavioral economics and behavioral finance—and Sunstein—often described as the father of behavioral law and economics—are themselves the authors of many of the studies demonstrating the human fallibility

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likely to imagine that they would behave in a sexually forceful manner”); Leaf Van Boven et al., Egocentric Empathy Gaps Between Owners and Buyers: Misperceptions of the Endowment Effect, 79 *J. Personality & Soc. Psychol.* 66, 72–73 (2000) (describing effect of ownership on selling prices); Leaf Van Boven & George Loewenstein, Social Projection of Transient Drive States, 29 *Personality & Soc. Psychol. Bull.* 1159, 1164 (2003) (discussing impact of being thirsty on participants' attitudes toward thirst). Interestingly, another recent book on human rationality contends that rational behavior can be seen everywhere and in every context throughout human history, including in sexual behavior. Tim Harford, *The Logic of Life: The Rational Economics of an Irrational World* 4–6, 26–29 (2008) (arguing that oral sex among teens is rational choice that reduces the risk of contracting HIV or getting pregnant and that prostitutes who do not insist on condoms have decided risks are small relative to premium they can charge for unprotected sex). To us, if in fact such behavior represents rational choices, these examples serve as evidence of the need to assist people in expanding their choice sets, so that sex workers by and large would not need to accept such choices at any risk premium.

17. Mazar et al., *Dishonesty*, supra note 15, at 29–33.

that is the subject of their book. In *Nudge*, they introduce the theoretical creature, “Econ,” something like Dworkin’s judicial Hercules,<sup>18</sup> who (unlike Hercules) operates perfectly for its own gains rather than for the greater jurisprudential good.<sup>19</sup> Thaler and Sunstein contrast this mythical creature Econ with the real “Human” and—building on the wealth of recent behavioral research findings—compare the theoretical actions of Econs with those of Humans in many policy related situations.

The Econ/Human contrast aims to show the *Nudge* reader that, while many existing policies may be perfectly suited for Econs, they are far less so for the regular Humans with respect to both meeting specific policy goals and maximizing overall market welfare. For example, forcing lenders to disclose various interest schemes under one term (i.e., APR<sup>20</sup>) in order to facilitate ease of comparison does little for those who do not readily understand the formula, or for those who are not adept at searching for all other noninterest-related fees or discounting the formula according to the lenders’ ability to change contractual terms over time. *Nudge* suggests offering software to consumers that can provide comparable, processed, and digested data, so that Humans can make intelligent financial decisions in situations as varied as buying a car, shopping for student loans, or using and paying off credit card debt (pp. 138, 141, 144). Similarly, while Econs would know to slow down in a dangerous road curve, Humans may be preoccupied and fail to do so. *Nudge* suggests that a simple, well-known visual illusion (e.g., driving over lines which get closer and closer makes it seem like one is driving faster) could be used to slow down the traffic in such a dangerous area (p. 38). Helping real people realize that they are driving too fast by painting the road appropriately has the potential to prevent accidents to everyone’s benefit. *Nudge* suggests that policymakers should concentrate on such simple

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18. Ronald Dworkin uses the metaphor of Judge Hercules (after the mythological hero) to represent an ideal judge, with the full knowledge, wisdom, and time to decide the one right answer in every case. Ronald Dworkin, *Law’s Empire* 238–75 (1986); Ronald Dworkin, *In Praise of Theory*, 29 *Ariz. St. L.J.* 353, 357–60 (1997).

19. In a recent article, the challenge to the characterization of humans as generically “Econ” is described in the following similar manner:

The discipline of economics is built on the shoulders of the mythical species *Homo economicus*. Unlike his uncle, *Homo sapiens*, *H. economicus* is unswervingly rational, completely selfish, and can effortlessly solve even the most difficult optimization problems. This rational paradigm has served economics well, providing a coherent framework for modeling human behavior. However, a small but vocal movement in economics has sought to dethrone *H. economicus*, replacing him with someone who acts “more human.” This insurgent branch, commonly referred to as behavioral economics, argues that actual human behavior deviates from the rational model in predictable ways.

Steven D. Levitt & John A. List, *Economics: Homo Economicus Evolves*, 319 *Science* 909, 909 (2008).

20. APR stands for annual percentage rate, a standardized expression of the effective interest rate the borrower will pay on a loan.

steps aimed at maximizing welfare by taking into account the irrationalities of Humans.

Unlike Ariely, Thaler and Sunstein sail rather quickly through many robust differences between the behavior of Econs and their real counterparts with the purpose of focusing the book on potential reforms and remedies. *Nudge* brings together many behavioral studies and concrete examples in order to suggest various practical solutions to core regulatory problems as well as to propose an overarching theory of the role of government policy. Thaler and Sunstein argue that if behavioral economics teaches us that we do not always act in our best interest, then policymakers must rethink the tools of regulatory command to change behavior and better align our immediate choices with our deeper, truer preferences. To accomplish this, *Nudge* urges policymakers to design policies that improve people's well-being through gentle nudges rather than through coercive measures (p. 6).

*Nudge* is unabashedly a highly prescriptive book. Thaler and Sunstein build on and further develop their previous work in which they argued that "libertarian paternalism" is not an oxymoron.<sup>21</sup> According to *Nudge*, choices can be presented in a manner that will help individuals act in their own interest without restricting their choices. The book's motto, "[c]hoosers are human, so designers should make life as easy as possible" (p.13), is the basis for *Nudge's* idea of "choice architecture" (p. 81–83). Thaler and Sunstein—using the acronym "NUDGES"—propose six subtle methods for devising a good choice architecture: iNcentives, Understanding mapping, Defaults, Giving feedback, Expecting errors, and the Structuring of complex choices (pp. 81–100). These principles, again, build on the notion that while Econs are not prone to error, Humans are. As such, when designing policy (or anything for that matter), one must take into account that Humans will frequently make judgment errors to their own detriment.

For example, with respect to the method of setting defaults, Thaler and Sunstein note that most people end up staying with the preset default option in situations ranging from savings decisions, organ donations, and privacy choices, to the onset time of one's screensaver (p. 34). In many of these situations, law inevitably must provide a default. Because one of the foremost roles of the central planner is to supply defaults,<sup>22</sup> policymakers should consider which default will be the most sensible. The prototypical example of changing defaults as a way of correcting behavioral failures involves a public pension system or an employer who runs a 401(k) plan (pp. 103–17). The administrator of the

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21. On the term and idea of libertarian paternalism, see *supra* note 3 as well as *infra* Part III.

22. See David Charny, *Hypothetical Bargains: The Normative Structure of Contract Interpretation*, 89 Mich. L. Rev. 1815, 1819 (1991) ("The law must supply a set of background conditions to the interpretation and enforcement of contracts—commonly referred to as 'default rules.'").

program can act paternalistically, but not coercively, by designing the plan as an “opt-out” policy. Because people are generally prone to accept the default and are too overloaded with decisions and information to opt out, many more people will save for the future under an opt-out scheme. Similarly, if the organ donation default is set to ‘donor,’ many more people will be donors (pp. 178–79). According to *Nudge*, since this is only default rule design, it does not interfere with employee or donor preferences even as it produces significant economic and social gains (pp. 11–13). In other words, law can contribute to people’s happiness and wealth without reducing their freedoms.

Feedback, another of Thaler and Sunstein’s six methods, promotes important learning in the formation of preferences, but understanding how to translate (or map) these preferences to a valid choice may require structural aids. That is, even if a person knows what she needs (e.g., I need a laptop that can run Microsoft Office and connect to the Internet), she may still have a hard time translating between her needs and the choice set (e.g., what is the appropriate CPU speed, RAM amount). Thaler and Sunstein use consumer credit choices as a central example of the possible benefits of a decisionmaking aid (pp. 142–44). As mentioned above, credit cards are characterized by fees of all sorts and one may need to spend quite a long time discriminating between them to determine whether a particular card fits her situation and preferences. With the help of software that can take as input all the different terms that characterize credit card offers and translate them into a meaningful and comparable representation of their implications, Humans could make decisions that would more closely mirror the decisions that Econs would make with the opaque information now provided by credit card companies.

In illustrating the possible methods of choice architecture, including smart defaults and feedback systems, *Nudge* develops a vision of how policymakers can steer people toward better decisions about their health, financial investments and savings, environments, and happiness—all without imposing views from above. Rather, policymakers can serve as the architects of choices, supporting, but not mandating, those choices that are wealth-maximizing, or at the very least, commanding user friendliness or transparency for Humans as opposed to Econs.

Ariely’s understanding of human irrationalities and their responses are largely in line with those of Thaler and Sunstein. By describing the range of ways that industry attempts to direct people’s choices, *Predictably Irrational* implies that policymakers should also be able to do the same. Moreover, *Nudge*’s idea of libertarian paternalism is largely consistent with Ariely’s view of the macro picture. Ariely writes: “If I were to distill one main lesson from the research described in this book, it is that we are pawns in a game whose forces we largely fail to comprehend” (p. 243). If the game in which we are pawns is that of human decisionmaking, then

surely providing a better game design does not reduce the pawns' freedom but rather empowers them.

## II. FROM PREDICTING TO NUDGING: SYSTEM 1, SYSTEM 2, AND THE LEGAL SYSTEM

### A. *Intuition, Cognition, and Irrationality*

A central contribution of behavioral economics to law and policy concerns the work of regulators. Using results from behavioral economics research, administrative agencies can provide better, more useful information to corporations, consumers, employees, students, and citizens in areas such as health, consumption, schooling, and finance. Consumer protection laws are one case in which decisions by such agencies can serve to check processes through which consumers buy things they do not need or overpay for things they do need.<sup>23</sup> Ariely's findings about the placebo effects of price information are highly relevant to the ongoing policy debate about the cost of drugs and the competition between generics and brand names, as well as to broader issues of healthcare reform.<sup>24</sup> *Predictably Irrational* and *Nudge* also provide new understandings about problems of self-control and intertemporal decisionmaking (i.e., the lack of consistency between our current decisions and the long-term beneficial outcomes), including the overvaluation of opportunities and options. Again, regulators must consider these phenomena when directing individual financial decisionmaking, such as when designing 401(k) retirement programs.

Neoclassical economics, while generally averse to regulation, allows that under certain conditions of imperfect information, regulation may be an appropriate response.<sup>25</sup> The behavioral insights enormously expand the world of imperfect information. Once one accepts that many of our decisions are based on imperfect, biased, and inaccurate calculations of expected benefits and costs, then it becomes clear that market failure

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23. These processes are summarized in *Predictably Irrational* (pp. 243–44).

24. For a description of Ariely's research, see *supra* notes 9–12 and accompanying text. In contrast to the policies of the United States, Canadian and European policies are highly committed to price controls of both generic and brand name prescription drugs. See Luke W. Cleland, *Modern Bootlegging and the Prohibition on Fair Prices: Last Call for the "Repeal" of Pharmaceutical Price Gouging*, 15 *Alb. L.J. Sci. & Tech.* 183, 200–01 (2004) (discussing various price control models, including the UK's maximum profit margin restrictions and Canada's limits on patent market exclusivity). Currently, many state legislatures in the United States are contemplating similarly reasoned bills. See *id.* at 205–10 (describing Medicare Prescription Drug, Modernization and Improvement Act of 2003 as impeding many attempts by state legislatures to implement Medicaid price controls).

25. See, e.g., Richard A. Epstein, *Behavioral Economics: Human Errors and Market Corrections*, 73 *U. Chi. L. Rev.* 111, 125–28 (2006) [hereinafter Epstein, *Behavioral Economics*] (describing Truth in Lending Act as one of few examples where direct regulation is beneficial and discussing "Schumer Box"—which places details of credit card loans in accessible format—as proper response to imperfect information).

is pervasive. The question of whether policy can and should strive to correct for imperfect decisions, however, depends on the prior question of whether and how behavioral biases can be subject to corrective measures. Observing the many deviations from rational behavior, often referred to as biased behavior, we argue that appropriate corrective measures must consider that the various biases have unique origins and thus must be counteracted in different ways.

A vast body of research in psychology, neuroscience, and decision-making focused on determining the types of mechanisms that may generate biases points to two types of biases: those that stem from reflexive or intuitive processes governing behavior unchecked (Type 1 biases derived from System 1 processes), and those that arise precisely because of processes that are meant to control, monitor, and override the intuitive responses (Type 2 biases derived from System 2 processes).<sup>26</sup> In lay terms, one may think about this as a distinction between biases that are caused by people not thinking carefully and those that are caused by people thinking, or indeed thinking too much. *Nudge* describes System 1 induced biases as cases in which our “automatic system” induces us to continue making the wrong choices even after we cognitively know about the bias (pp. 19–22). According to Thaler and Sunstein, debiasing can occur in such cases when our “reflective system” disciplines the automatic system (p. 234). The distinction between System 1 and System 2 failures traces a plethora of dual-processes cognitive models, such as automatic-controlled, emotional-cognitive, reflexive-reflective, and many others, but the logic that manifests in all of them with respect to overcoming biases is almost the same.<sup>27</sup>

Type 1 biases caused by intuitive/reflexive reactions may be easy to correct; correction, in fact, may rely simply on asking people to think carefully or allowing them time to do so.<sup>28</sup> For example, consider the

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26. See Daniel Kahneman & Shane Frederick, Representativeness Revisited: Attribute Substitution in Intuitive Judgment, in *Heuristics and Biases: The Psychology of Intuitive Judgment* 49, 51 (Thomas Gilovich et al. eds., 2002) (discussing two families of cognitive operations); Leonard Lee et al., In Search of Homo Economicus: Cognitive Noise and the Role of Emotion in Preference Consistency 4 (undated) (unpublished manuscript, on file with the *Columbia Law Review*) (describing “emotional system” as “more holistic, affective, concrete, and passive” and “cognitive system” as “more analytic, logical, abstract and active”).

27. See Lee et al., *supra* note 26, at 4–5 (collecting research on “dual-system conceptualizations”).

28. See On Amir & Jonathan Levav, Choice Construction Versus Preference Construction: The Instability of Preferences Learned in Context, 45 *J. Marketing Res.* 145, 154–55 (2008) [hereinafter Amir & Levav, Choice Construction] (demonstrating that people asked to consider tradeoffs when making decisions exhibited much greater preference stability in subsequent choices); On Amir & Dan Ariely, Decisions by Rules: The Case of Unwillingness to Pay for Beneficial Delays, 44 *J. Marketing Res.* 142, 146–47 (2007) [hereinafter Amir & Ariely, Decisions] (demonstrating that people asked to think carefully about their decisions are less likely to choose the less preferred outcome relative to people who made choices without this slight intervention); Kelley Goldsmith & On

attraction effect, caused by asymmetric dominance mentioned by Ariely at the outset of his book (pp. 11–14).<sup>29</sup> This effect surfaces in situations (illustrated in Figure 1) in which three alternatives are given,  $\{a, b, a'\}$ , and the third alternative  $\{a'\}$  is dominated by—or in layman's terms, is clearly worse than—one of the other choices,  $\{a\}$ . In such situations, the number of people that choose the dominating alternative,  $\{a\}$ , ends up being larger than the case in which the third dominated alternative,  $\{a'\}$ , was not in the choice set. Thus, adding a third alternative increases the choice share of one of the existing options, which violates regularity.<sup>30</sup> It has been shown that the addition of the dominated alternative makes the dominating one seem much better; that is, at an intuitive perceptual level the dominating alternative,  $\{a\}$ , becomes better and is thus chosen more often.<sup>31</sup> This attraction effect disappears when people think carefully about their choices,<sup>32</sup> or when no intuitive tradeoff exists.<sup>33</sup>

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Amir, Reflexive Positivity: How Uncertainty Can Improve Promotions 21–22 (unpublished manuscript, on file with the *Columbia Law Review*), available at <http://ssrn.com/abstract=1095452> (last visited Oct. 1, 2008) (demonstrating that people asked to think carefully about their judgments were much less likely to overvalue a gamble).

29. Using photographs of students at MIT, Ariely created sets of pictures that included two similarly attractive students and one copy of one of the photos that was artificially made to look slightly less attractive (pp. 11–13). Other students then received the sets of three photos and circled the photo that most appealed to them. They ended up choosing the photo that resembled but dominated the artificially altered one 75% of the time (p. 14). See also Huber et al., *supra* note 5, at 90 (demonstrating basic attraction effect, then called asymmetric dominance); Simonson, Choice, *supra* note 5, at 170 (finding people who choose compromise option take more time and generate longer and more complex thought protocols than those who choose dominating option in attraction effect).

30. Regularity, which refers to the consistency of preferences, is the lowest threshold condition for rational behavior. See Amos Tversky & Itamar Simonson, Context-Dependent Preferences, 39 *Mgmt. Sci.* 1179, 1179 (1993) (noting theory of rational choice assumes independence of irrelevant alternatives). In these cases, a choice of an outcome extreme on one dimension from a set of two alternatives should imply by regularity that if a more extreme option becomes available in the set of three alternatives, the decision maker would not switch to the option extreme on the other dimension.

31. Ravi Dhar & Itamar Simonson, The Effect of Forced Choice on Choice, 40 *J. Marketing Res.* 146, 157 (2003) (demonstrating that people who could opt out from choosing any alternatives were less likely to choose compromise alternative, but were more likely to choose dominating alternative in attraction effect); Anastasiya Pochepstsova et al., Deciding Without Resources: Resource Depletion and Choice in Context, *J. Marketing Res.* (forthcoming) (manuscript at 22–23, on file with the *Columbia Law Review*), available at <http://www.marketingpower.com/ResourceLibrary/Documents/JMRForthcoming/Deciding%20Without%20Resources.pdf> (demonstrating that people depleted of cognitive executive resources were *more* likely to choose dominating outcome than people in control group).

32. See Amir & Levav, Choice Construction, *supra* note 28, at 156 (finding in attraction effect circumstances that stable preference can be attained by “explicitly instructing respondents to attend to the attribute trade-offs implied by their choices”).

33. See Shane Frederick & Leonard Lee, Attraction, Repulsion, and Attribute Representation 4–5 (undated) (unpublished manuscript, on file with the *Columbia Law Review*) (demonstrating and discussing possible reasons attraction effect increases with clear and salient dominated alternatives).

In order to prevent Type 1 biases, one must only think carefully about the problem and consider the tradeoffs. Often, simply asking people to do so is sufficient to activate System 2, which overrides the Type 1 biases.<sup>34</sup> The scope of Type 1 biases also extends to decisions that have a normative or even moral nature to them: Behaviors people follow because they feel like they are the right thing to do may be the result of overlearned rules, i.e., rules that become second nature and are followed automatically.<sup>35</sup> Such rules are often followed without consideration of the particular case, and may easily be overridden by consideration of the facts at hand.<sup>36</sup> Finally, in a similar vein, recent evidence suggests that well-established biases such as reference dependence—the tendency to judge things not in absolute value, but rather in relative terms as compared to some focal level (the reference point)—may also be of Type 1 nature: When people are restricted to reliance on simplistic processing they are far more likely to exhibit reference dependence than when they are unrestricted.<sup>37</sup> A common method to change the reference point is to frame the decision situation in a different way (e.g., meat can either be 93% lean or 7% fat). Consistent with this, a large literature indicates that choices can be influenced if they are framed by well-chosen reference points.<sup>38</sup>

By contrast, biases that are caused by controlled processes generated through System 2 (“Type 2 biases”) may not be as easy to correct. Consider what, at first glance, appears to be a relative of the attraction effect—the compromise effect (Figure 1).<sup>39</sup> The effect is caused when in a three alternatives choice set  $\{a, b, c\}$ , two  $\{a, c\}$  bracket the third  $\{b\}$ , causing it to be the “compromise alternative.” That is, in the tradeoff between several dimensions, the middle option  $\{b\}$  does not excel on any one in particular, but delivers a middling level on all. In such cases people tend to choose the middle alternative more often even though adding the third alternative ( $\{c\}$  for example) to the choice set should not increase the relative share between the other two in favor of the one closest to it ( $\{b\}$  in this case). This result again violates regularity. However, in this case, the bias, unlike the attraction effect, is a Type 2 bias. It is caused by considering the alternatives and the tradeoffs of the alternatives carefully and resolving to choose the compromise. This effect grows

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34. See Amir & Ariely, *Decisions*, supra note 28, at 149–50 (discussing results demonstrating that when people are asked to consider carefully, they will overcome automatic rules).

35. See *id.* at 146–48 (describing tendency of people to “follow [ ] rules for action in a moral-like manner”).

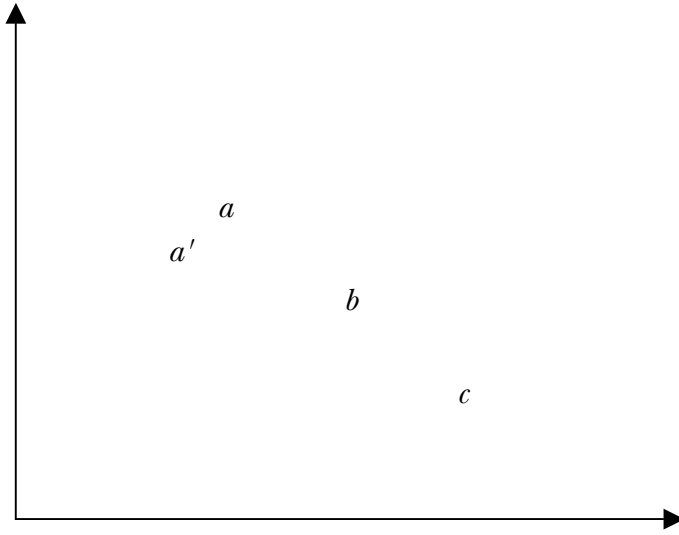
36. *Id.* at 149 (finding people follow automatic rules, yet are able to override them when considering the facts and merits of the particular case at hand).

37. Pocheptsova et al., supra note 31, at 13–14.

38. See Craig McKenzie, *Framing Effects in Inference Tasks—and Why They Are Normatively Defensible*, 32 *Memory & Cognition* 874, 875–76 (2004) (collecting sources).

39. For a description of the compromise effect and relevant experiments, see Simonson, *Choice*, supra note 5, at 171–72.

FIGURE 1: THE ATTRACTION EFFECT AND THE COMPROMISE EFFECT



when one is accountable for the choice,<sup>40</sup> and disappears if people are restricted to simplistic processing.<sup>41</sup> This conforms with the expectation that a Type 2 bias would only increase if people were asked or allowed to think more carefully about the decision.<sup>42</sup>

Another example that reveals irrational inconsistency due to a Type 2 bias is the special case of intransitivity. Transitivity describes a preference structure such that if  $\{a\}$  is preferred to  $\{b\}$ , and  $\{b\}$  is preferred to  $\{c\}$ , then this implies that  $\{a\}$  is preferred to  $\{c\}$ .<sup>43</sup> Transitivity is a special case of consistency, which is a fundamental requirement of rationality. Unlike lay perceptions, recent evidence suggests that greater reliance on the cognitive system and careful consideration of alternatives may actually increase intransitivity.<sup>44</sup> This is because, in contrast to our automatic affective reactions that are quite consistent, our cognitive processes are often inconsistent in valuing different aspects of the choice alternatives. Such inconsistent weights generate stochastic noise and increase inconsistency. In a classic example, people who were asked to choose a poster by thinking carefully about all the aspects of all the choice alternatives ended up less likely to like their choice (as measured by the likeli-

40. *Id.* at 168 (demonstrating that people who would later need to explain their choices were more likely to choose compromise alternative).

41. Pocheptsova et al., *supra* note 31, at 16–18 (demonstrating “resource depletion in a prior task led to a reduction in the compromise effect”).

42. See *id.* at 26–27 (finding “the choice of a compromise option stems from more effortful and careful processing”).

43. For a more detailed analysis of transitivity as a property of consumer preference, see David M. Kreps, *A Course in Microeconomic Theory* 21–24 (1990).

44. See Lee et al., *supra* note 26, at 26 (finding that subjects whose cognitive capacities were constrained made more choices consistent with transitivity).

hood they would actually hang the poster on the wall) than those who chose more intuitively.<sup>45</sup> The experiment illustrates that those thinking carefully about their choices may make inferior decisions to those who simply rely on intuitive processes. Clearly, it is much more challenging to correct such errors that occur when people think too much (Type 2 biases).

These examples suggest that while methods for “debiasing” Type 1 biases may be readily available for policymakers, it may be extremely hard to correct Type 2 biases. In the latter cases, it might be simpler to consider “rebiasing” choices, i.e., manipulating outcomes without eliminating (but rather using) the source of the bias, if a more appropriate direction is agreed upon.<sup>46</sup>

### B. *Debiasing, Rebiasing, and the Limits of Regulation in Correcting Certain Decisions*

Regardless of the designation of the corrective measure, the distinction between different biases based on the type of mechanism that produces them is critical when examining choice architecture. As Thaler and Sunstein suggest in *Nudge*, in every possible situation a choice architecture already exists (p. 3). Therefore, one must begin by asking whether such architecture is appropriate, beneficial, or even optimal. A first step in this inquiry must include the identification of the type of mechanism underlying potential biases. The second step is to identify what mechanism the proposed solution should employ. Some choice architecture solutions can be classified as attempts to correct or eliminate an unconscious human bias, while other choice architecture solutions can be classified as attempts to harness such a bias and use it to channel individuals toward the best decisions.

Choice architecture solutions that target bias correction are often appropriate in cases in which individual decisionmakers face too much information with too little expertise. One example of such choices discussed in *Nudge* are choices about health insurance and prescription drug coverage (pp. 159–74). Distilling information about health insurance into a more manageable system would unequivocally be positive, as it would enable the decisionmaker to understand the implications of different choices and make the choice that best suits his or her needs. However, providing better and clearer information in an attempt to override biases may have drawbacks as well. One should also consider whether such choices are subject to accountability to others or to overweighing less relevant attributes simply because they are now presented clearly;

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45. Timothy D. Wilson & Jonathan W. Schooler, *Thinking Too Much: Introspection Can Reduce the Quality of Preferences and Decisions*, 60 *J. Personality & Soc. Psychol.* 181, 185 (1991) (describing results of an earlier unpublished experiment).

46. See Richard P. Larrick, *Debiasing*, in *Blackwell Handbook of Judgment & Decision Making* 316, 317 (Derek J. Kohler & Nigel Harvey eds., 2004) (discussing when debiasing is simply rebiasing).

both might lead to Type 2 biases. That is, helping people think more carefully about the decision may yield unintended consequences, such as overemphasis of decision dimensions that previously would not have been salient, but are now clearly visible and likely to attract undue attention.

The second category of choice architecture solutions—which seeks to employ a person’s intuitive biases for socially desirable results—arises in several places in the two books, especially when they deal with decisions about spending money. Money is unique in that it is universally desired even though it has no direct hedonic effect.<sup>47</sup> That is, money is useful not because we can eat, drink, or feel it, but because it is fungible, and can be easily translated into hedonic experience.<sup>48</sup> Just as humans cannot perfectly predict happiness, neither can money be translated perfectly into happiness.<sup>49</sup> Importantly, money’s artificial nature sets the stage for policies that harness individual biases in the interest of macro-efficiency. For example, an individual’s inability to efficiently trade-off future with current benefits may lead to insufficient savings rates, but may also open the door for corrective measures, such as *Nudge*’s “Save More Tomorrow” concept (pp. 103–17). This revised savings policy, using the recognition that people are mostly “present biased”<sup>50</sup>—they discount the future heavily compared to the present—defaults individuals into committing to increase their savings in the future. Such a policy redirects two biases—the default bias and the present bias—into better choices; it does not, however, correct the root cause biases that lead to poor financial decisions.<sup>51</sup>

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47. As put by Douglas Adams: “Money has no meaning outside ourselves, it is something that we have created that has a powerful shaping effect on the world, because [it’s] something we all subscribe to.” Douglas Adams, *Is There an Artificial God?*, Speech at Digital Biota 2 Conference (Sept. 11, 1998), available at <http://www.biota.org/people/douglasadams/> (on file with the *Columbia Law Review*).

48. But see Amir et al., *Dissociation*, supra note 6, at 13–16 (arguing such mapping does not take place).

49. See Gilbert, *Stumbling*, supra note 4, at 192–97, 230–31 (stating that, in fact, we are not very good in predicting what might make us happy or sad, the magnitude of the emotion, or its duration). A focus on money has even been shown to lead to less social behavior. See Kathleen D. Vohs et al., *The Psychological Consequences of Memory*, 314 *Science* 1154, 1155 (2006) (finding those primed to think about money were less likely to volunteer to help others than control group).

50. See David Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 *Q.J. Econ.* 443, 444–46 (1997) (describing how people often use future commitments as a means of exerting self-control over savings plans); Gal Zauberman et al., *Discounting Time and Time Discounting: Subjective Time Perception and Intertemporal Preferences*, *J. Marketing Res.* (forthcoming) (manuscript at 8–10, on file with the *Columbia Law Review*) (suggesting much of present bias can be explained by how people consider different time horizons as opposed to how they discount outcomes differentially).

51. As Ariely points out in *Predictably Irrational*, the private sector has known about human biases for a long time and, more often than not, companies do not hesitate to take advantage of these biases to increase their profit (pp. 1–21).

As discussed in the previous paragraph, some suggestions for improving choice architecture actually rely on biases to generate a better outcome. Utilizing such interventions without careful consideration of the underlying mechanisms may render them less effective. For example, if the mere act of changing the organ donation default to opt out—in order to take advantage of the strong effect of the stickiness of defaults—causes people to consider the decision more carefully and perhaps to consult their families, a reactive effect may emerge and the donation rate may not increase to the desired level. Moreover, learning to suppress biases can have unintended effects and result in a myriad of new predictably and unpredictably rational and irrational behaviors. For example, the idea of introducing a penalty default—one that is the least desirable among the choices—is in fact advanced by other law and economics scholars simply to force the contracting sides to consider more fully the terms of their agreement, but this may also lead to a high number of inefficient decisions.<sup>52</sup> Similarly, if the manipulative use of street paint on Lake Shore Drive in Chicago (to create the illusion that one is driving faster) is made known to all the drivers, they may very simply override the intuitive (Type 1) response.

None of this discussion should underplay the significance of recent behavioral insights. Rather, it is important to warn against overestimating the ability of choice architecture to solve the social problems with which they are concerned. It is particularly important to understand what type of mechanism is causing suboptimal decisionmaking, and whether the solution should attempt to eliminate an individual's intuitive response by engaging the rational mind, or should use the power of the intuitive processes to change choices without engaging the rational mind. *Predictably Irrational* focuses more extensively on identifying the mechanisms underlying the biases and helpfully informs the readers of the possibilities of correction, but stops short of laying out policy solutions. When combined with *Nudge*, the books offer first steps in unlocking the potential of predicting and nudging through law and policy.

The key to considering Ariely's insights and the principles suggested by Thaler and Sunstein as precursors to amending policy lies in identifying the root of the problem to be solved. As our analysis outlines, Humans have certain predictable limitations (Type 1 biases), and Humans trying to be Econs have others (Type 2 biases). In order to navigate the vast maze of psychological mechanisms that may lead to bias, and with an eye to the future directions of the study and application of behavioral law and economics, we call for a more explicit identification of the type of bias at hand and for behavioral research outcomes that target dynamic interactions rather than one-shot lessons.

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52. See Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 Yale L.J. 87, 91 (1989) ("Penalty defaults are designed to give at least one party to the contract an incentive to contract around the default rule and therefore to choose affirmatively the contract provision they prefer.").

As has been argued in this section, it is critical to assess the type of bias at hand and apply proper corrective measures. It is also important to acknowledge that, at times, addressing irrationalities through policy mechanism itself relies on manipulation rather than elimination of the behavioral bias. In sum, *Nudge* and *Predictably Irrational* take a significant step beyond the documentation of behavioral biases and attempt to identify general principles by which one may construct and improve policy such that the micro and macro good is served. Thus far, we have outlined these principles and highlighted their importance in determining which types of policy recommendations may be most likely to be effective. In Part III we consider the range of policy tools available for effective application of these principles.

### III. NEITHER LIBERTARIAN, NOR PATERNALISTIC: NEW GOVERNANCE AS THIRD-WAY ORDERING

Beyond concrete examples and reform proposals, *Predictably Irrational* and *Nudge* raise important jurisprudential questions about the limits of individual choice and the legitimacy of government intervention. In particular, Thaler and Sunstein develop their belief that lessons from experimental psychology and economics can revolutionize the field of law and policy, informing a new species of regulations, termed “libertarian paternalism” (pp. 4–6).<sup>53</sup> While we are generally enthusiastic about Thaler and Sunstein’s notion that regulation can frequently be simultaneously more effective and less interventionist than traditional command-and-control approaches, we begin this Part by cautioning against overclaiming the regulatory revolution, as is implied in the term “libertarian paternalism.” We argue both that Sunstein and Thaler’s vision is incompatible with the principles of libertarianism and paternalism and, more importantly, that the inclusion of the term libertarianism sells short some of the best attributes of regulation through choice architecture. Part III.B then suggests that *Nudge*’s proposals of choice architecture are related to a broader school of thought termed “new governance,” which calls for an expansion of the policymaking toolbox. New governance offers a comprehensive vision for policy reform; one that integrates design with incentives, collaboration with control, process with coordination, information with data mining and data minding, and reflexive regulation with monitoring and enforcement. Finally, Part III.C focuses on the ways organizational theory and behavioral insights further inform institutional design.

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53. For an explanation of libertarian paternalism, see *supra* note 3.

A. *Libertarian Paternalism as the Wrong Heuristic for Generating Regulatory Innovation*

The term “nudge,” in addition to being an acronym,<sup>54</sup> is intended to signify Thaler and Sunstein’s belief that interventions designed to correct irrationalities should and can be light and modest, rather than intrusive or heavy-handed. According to *Nudge*, regulation that relies on sophisticated design of defaults and related choice architecture methods can improve welfare without reducing freedom. Thaler and Sunstein therefore view their idea of gentle policy nudges as appealing to “conservatives, moderates, liberals, self-identified libertarians, and many others” (p. 248). The authors are not unique in their desire to occupy the uneasy middle ground between conservative and liberal politics and to defy the conventional boxed camps that have long impeded policy reforms.<sup>55</sup> Since the mid-1990s, Democrats and Republicans alike seem to agree that “[t]he era of big government is over”<sup>56</sup> and that reforms should aim to be “‘neither left nor right.’”<sup>57</sup> The pairing of two loaded yet ambiguous terms—libertarian *and* paternalism—is in itself a heuristic device, a “why not?” moment if you will.<sup>58</sup> By using this phrase, Thaler and Sunstein suggest to their readers that the regulatory toolbox can be expanded to include methods which satisfy both the left and the right. But as behavioral economics teaches us, reframing and the use of heuristics, old and new, can do as much harm as good for our decisionmaking outcomes. We view the term “libertarian paternalism” as potentially undermining the broader fundamental lessons about improving and expanding the tools of social policy. The pairing of the two concepts to form a soundbite which represents the range of innovative solutions to problems of market and regulatory failures both overclaims and understates the contribution of behavioral economics to law and policy. Moreover, we question whether setting defaults, the libertarian paternalist’s primary design tool, is always the least interventionist tool in the policymaker’s toolbox, which includes such instruments as incentives, collaborative standard setting and enforcement, education, and self-deliberation processes.

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54. See *supra* Part I.B.

55. See Lobel, *Renew Deal*, *supra* note 2, at 459 (describing the transcendence of left-right political alignments in new governance scholarship).

56. Address Before a Joint Session of the Congress on the State of the Union, 1 Pub. Papers 79, 79 (Jan. 23, 1996).

57. Joel F. Handler, *The Presidential Address, 1992: Postmodernism, Protest, and the New Social Movements*, 26 *Law & Soc’y Rev.* 697, 722 (1992) (quoting Carl Boggs, *Social Movements and Political Power* 220 (1986)); see also Orly Lobel, *The Paradox of Extralegal Activism: Critical Legal Consciousness and Transformative Politics*, 120 *Harv. L. Rev.* 937, 984 (2007) [hereinafter *Lobel, Paradox*] (using quote to illustrate “an aversion to any metanarrative and a resignation from theory”).

58. See Barry Nalebuff & Ian Ayres, *Why Not?: How to Use Everyday Ingenuity to Solve Problems Big and Small* 3 (2003) (describing how a “why-not attitude” can lead to innovative solutions).

*Nudge* defines “libertarian paternalism” as including “actions, rules, and other nudges that can be easily avoided by opting out” (p. 248).<sup>59</sup> The paternalist component of the “libertarian paternalism” duo signifies that the nudges are designed to improve individual welfare, well-being, and happiness in accordance with an individual’s own preferences. The libertarian component signifies the near-zero costs and opt-out rights “designed to retain freedom of choice” (p. 237). Thaler and Sunstein explain that in many (perhaps in most) cases, choice architecture is inevitable.<sup>60</sup> Once a public program has been adopted, its basic design and defaults must be in place. Because defaults are unavoidable, policymakers have an obligation to present the option that best reflects people’s beliefs about a good life and also allows for an opt out from the default route. For Thaler and Sunstein, defaults are a way of “padding the path of least resistance” (p. 83). In other words, defaults simply facilitate a fuller expression of individuals’ desires by choosing welfare-enhancing defaults rather than remaining neglectfully default neutral, but as we will show, this approach is neither libertarian nor paternalistic.

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59. On a theoretical level, *Nudge* is a bit thin in its definitions and analysis of both libertarianism and paternalism. On diverging strands within libertarian theory, see generally Richard A. Epstein, *Skepticism and Freedom: A Modern Case for Classical Liberalism* 2–8 (2003) (endorsing classical libertarianism over other forms such as consequentialist, natural, or utilitarian libertarianism); Robert Nozick, *Anarchy, State, and Utopia* 141–42 (1974) (describing disagreements between libertarians); Randy E. Barnett, *The Moral Foundations of Modern Libertarianism*, in *Varieties of Conservatism in America* 51, 51–55 (Peter Berkowitz ed., 2004) (tracing history of schools of libertarianism); Barbara Fried, *Left-Libertarianism: A Review Essay*, 32 *Phil. & Pub. Aff.* 66, 67–68 (2004) (book review) (discussing left-libertarianism as a middle ground between egalitarian libertarianism and conventional libertarianism); Murray N. Rothbard, *Robert Nozick and the Immaculate Conception of the State*, *J. Libertarian Stud.*, Fall 1977, at 45 (book review) (critiquing form of libertarianism espoused in Nozick, *supra*). On the diversity in paternalist theories, see generally Joel Feinberg, *Harm to Self* 3–8 (1986) (discussing varied meanings and theories of paternalism); Donald VanDeVeer, *Paternalistic Intervention* 16–24 (1986) (examining ways of defining paternalism and how such definitions affect evaluation of paternalistic systems); Gerald Dworkin, *Moral Paternalism*, 24 *Law & Phil.* 305, 305 (2005) (listing and describing versions of paternalism); Joel Feinberg, *Paternalism*, in *Encyclopedia of Philosophy* 390, 390–91 (Donald M. Borchert ed., Supp. 1996) (noting differences between physical and moral paternalism as well as hard and soft paternalism); Douglas N. Husak, *Legal Paternalism*, in *The Oxford Handbook of Practical Ethics* 387, 388–89 (Hugh LaFollette ed., 2003) (discussing fundamental disagreements about nature of paternalism and application of paternalism in legal contexts).

60. According to *Nudge*, “[c]hoice architecture, both good and bad, is pervasive and unavoidable” (p. 252). For example, Thaler and Sunstein explain that even if the state gets out of the business of licensing marriages and civil unions, contract law would still be needed to define what partners owe each other during and after the relationship (p. 237). In this sense, their understanding recalls earlier legal realists and critical legal thinkers who understood law as constituting the background rules of all human relationships. See Lobel, *Paradox*, *supra* note 57, at 941 (describing critical insight that law exists in every sphere of life, even those spheres that are seemingly unregulated).

1. *Libertarianism and the Impossibility of Value-Neutral Interventions.* — The lessons of behavioral economics show that defaults are sticky as a result of more than one bias. *Nudge* teaches that the status quo bias, inertia, and the endowment effect all suggest that people tend to stick with the default presented to them (pp. 7–8, 83). Because a default must be chosen, and because defaults are sticky, choice architecture can often be used as a solution to many regulatory design problems. According to *Nudge*, the default rule should generally be the one that is wealth maximizing (pp. 4–5). This aim illustrates the error in classifying such default rules as libertarian. Behavioral economics suggests that choice architecture is simply a means through which to best achieve previously defined ends, remaining neutral between such ends. The ends themselves, however, are not value neutral. *Nudge*'s idea of promoting more savings by setting defaults is one example of this.<sup>61</sup> Incentivizing savings, such as by *Nudge*'s envisioned "Save More Tomorrow" programs, presents a clear choice about how societies should treat money throughout the life cycle. The "Save More Tomorrow" programs have indeed been well received in practice, and translated into legislative bills with much bipartisan enthusiasm.<sup>62</sup> It must be recognized however that promoting savings, like many other goals of *Nudge*, relies on underlying assumptions that may run contrary to the libertarian principle of value neutrality.

Most broadly, the idea that the goal of policymaking is to promote rational decisions assumes that rationality, including preference consistency, is in itself a worthy cause. Libertarians value freedom of choice above all, including the freedom to make mistakes and cognitive errors. More programmatically, in many cases rational people will disagree on welfare goals. Even with regard to savings or better health choices, Thaler and Sunstein's assumption that, absent irrationalities, every individual would agree that future savings and improved long-term health are better than immediate satisfaction and gratification seems problematic.

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61. See *supra* note 50 and accompanying text. Organ donation is another example. The default makes a tremendous difference from a libertarian perspective. The default that one is an organ donor unless actively opting out by sending in a nonconsent form is precisely contrary to the libertarian presumption of no state invasion into one's body. In such instances, libertarianism may become meaningless if it is defined too broadly. Simply providing the option of active exit will not satisfy pure libertarians, who are only looking to preserve freedom.

62. For example, Senator Jeff Bingaman (D-N.M.) introduced the Save More for Retirement Act of 2005, S. 875, 109th Cong. (2005), which "encourage[d] employers to add a feature to its 401(k) or similar plans to enroll its employees in the plan upon being hired unless the employee notifies the employer that he or she does not want to participate in the plan," 151 Cong. Rec. S4118 (daily ed. Apr. 21, 2005) (statement of Sen. Bingaman), and Representative Rahm Emanuel (D-Ill.) introduced the 401(k) Automatic Enrollment Act, H.R. 1508, 109th Cong. (2005), which suggested "automatic enrollment into 401(k)s," 151 Cong. Rec. H6179–80 (daily ed. July 20, 2005). For further discussion of Save More Tomorrow programs, see generally Richard H. Thaler & Shlomo Benartzi, *Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving*, 112 J. Pol. Econ. S164 (2004).

The problem lies in the axiom of revealed preferences—the proposition that people’s actions usually reflect their preferences.<sup>63</sup> For example, it is entirely possible that many smokers may smoke not because they are irrational about the risks, but because they choose to assume the risks and live their lives as smokers. Similarly, some people choose to take physical risks by participating in extreme sports not because they mentally discount those risks, but because they make the decision that it is the lifestyle they would like to pursue.<sup>64</sup> Also, new empirical findings on different (but presumably equally rational) cultures have reasonably challenged the idea that increased wealth is a valid policy goal, finding that more money does not necessarily increase happiness.<sup>65</sup> This is not to dispute the need for public policy to take a stance on various health and welfare issues. On the contrary, our argument is that public policy inevitably should and does attempt to objectively evaluate better life choices and thus it is better to explicitly recognize these value judgments as a significant part of the legal process rather than to hide them by describing choice architecture as “libertarian.” Although *Nudge* envisions that the choice of end goals will remain open because of an opt-out architecture, one must first recognize that the default itself conveys a normative message. In other words, however laudable these goals of promoting health, welfare, human capability, equality, and redistribution might seem to the vast majority, they cannot—and should not—be promoted under the umbrella of libertarianism.

As both *Predictably Irrational* and *Nudge* recognize, the frame in which information is presented both responds to and constructs social norms. Preferences are endogenously shaped by the framing and setting of defaults. Ariely’s analysis of the effect of expectations on actual experiences and taste sheds further light on the endogeneity inherent in individual preferences, which are always a function of experience and existing social and cultural norms (pp. 155–72). Preferences are adaptive and can change within the same individual over time as expectations and desires

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63. See P.A. Samuelson, A Note on the Pure Theory of Consumer’s Behaviour, 5 *Economica* 61, 65 (1938) (demonstrating original mathematical derivation). Mas-Colell et al. describe the axiom of revealed preferences as “reflect[ing] the expectation that an individual’s observed choices will display a certain amount of consistency,” and note that “[t]he idea is that the choice of  $x$  when facing the alternatives  $\{x, y\}$  reveals a proclivity for choosing  $x$  over  $y$  that we should expect to see reflected in the individual’s behavior when faced with the alternatives  $\{x, y, z\}$ .” Andreu Mas-Colell et al., *Microeconomic Theory* 10 (1995).

64. See George Loewenstein, Because It Is There: The Challenge of Mountaineering . . . for Utility Theory, 52 *Kyklos* 315, 328 (1999) (arguing that mountaineers often desire feeling of goal completion more than they derive satisfaction from it).

65. See Daniel Kahneman et al., Would You Be Happier if You Were Richer? A Focusing Illusion, 312 *Science* 1908, 1908 (2006) (“Although reported life satisfaction and household income are positively correlated in a cross section of people at a given time, increases in income have been found to have mainly a transitory effect on individuals’ reported life satisfaction.”).

continue to be heavily influenced and shaped by marketing communications and social situations (pp. 190–91). In other words, defaults themselves are norm generating. These lessons from *Nudge* and *Predictably Irrational* point to the inevitability of a normative stance in any legal order. While this understanding is consistent with liberal theories about the role of the state and the regulator,<sup>66</sup> it cannot be consistent with libertarian positions. The idea that the formation of norms and values is a task for government is antithetical to libertarian principles, which view constraints on and intervention into individual action and way of life as a violation of liberty.<sup>67</sup> Under the libertarian ideal, it is precisely the absence of government that allows individuals to naturally form self-governing rules, beliefs, norms, codes, and contracts.<sup>68</sup>

The challenge of normativity is even more acute given that most programs, including choice architecture, entail costs. Most basically, if policymakers are to become consumers of the discipline of judgment and decisionmaking, they must be wise consumers.<sup>69</sup> In order to apply behavioral economics insights effectively, there must be a continuous study as to whether the chosen design attains its intended effect, both at the micro and macro levels. In addition to research and development costs, policy programs themselves entail operating costs, whether they are of the traditional command-and-control kind or involve noncoercive regulatory design. Once policymakers enter the business of directing and improving decisionmaking, taxpayer money will be allocated to the task.

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66. See, e.g., John Rawls, *A Theory of Justice* 274–84 (1971) (arguing government regulation is necessary to achieve just distribution of resources so that all individuals can compete as equals in economic sphere); Connie S. Rosati, *Explanation, Vindication, and the Role of Normative Theory in Legal Scholarship*, 43 *San Diego L. Rev.* 927, 935 (2006) (“Liberalism need not be, and indeed cannot be, value neutral toward *all* competing conceptions of the good, and I doubt that any prominent liberal has meant to claim otherwise.”).

67. Nozick, *supra* note 59, at 171–74.

68. See, e.g., *id.* at 307–09 (describing utopian world as one with “a wide and diverse range of communities which people can enter if they are admitted, leave if they wish to, [and] shape according to their wishes”).

69. Indeed, one possible objection to *Nudge’s* call for policymakers to correct human rationality is that policymakers themselves are human decisionmakers, and thus also only boundedly rational, and at times, straight out irrational. While this is a serious concern in some contexts, frequently the information access and expertise of the regulator positions her better than the average person to undertake the task of rational design. This further helps explain why some economists are hesitant to accept the implications of recent developments in behavioral economics as requiring more market regulation. Public interventions are costly, they may often miss the target, regulatory agencies are subject to capture, and they are prone to many of the same failures they aim to correct. For a discussion of agency capture, see generally Sidney A. Shapiro & Rena Steinzor, *Capture, Accountability, and Regulatory Metrics*, 86 *Tex. L. Rev.* 1741 (2008). Finally, neoclassical economists fear that regulation will create new distortions, new inefficiencies, and barriers to entry. See, e.g., Epstein, *Behavioral Economics*, *supra* note 25, at 120 (arguing that market forces alone are sufficient to correct most information discrepancies).

Cost-benefit analysis will be required to determine whether these ventures are effective and worthwhile.

Moreover, the correction of biases has significant redistributive effects. Encouraging savings through defaults, tax subsidies, and various social insurance programs affects people differently. Assisting people to reach better choices about their finances, health, and happiness can often result in some unhappiness for other, possibly more rational, market actors. For example, businesses that have long relied on marketing strategies that exploit behavioral failures may experience reduced profits. This is a consideration for regulation in the area of consumer protection—mentioned by both *Predictably Irrational* (pp. 23–48, 173–94) and *Nudge* (pp. 132–74)—which compensates for behavioral biases and irrationalities that lead to misguided consumer choices. If government intervenes to help consumers become more sophisticated about their lending, saving, and spending, corporations will lose money. Credit card and mortgage brokers have long studied market failures as part of their marketing task forces.<sup>70</sup> Indeed, in the internal lingo of the credit card industry, those who resemble most closely the mythical Econ are called “deadbeats,” for those are the customers who are the least attractive to the marketers.<sup>71</sup> As a result, just as choice architecture is itself frequently inevitable, within choice architecture, normative judgments about the desirability and fairness of certain distributional outcomes are also inevitable. These normative judgments will almost always favor one group over another and preclude the use of the term “libertarian” to describe the type of regulation Thaler and Sunstein propose in *Nudge*.

The distributional effects of government regulation, even when opt outs are made available, are particularly pronounced in the many contexts in which irrationality is not universal. Sophisticated market actors, such as the corporations mentioned above, may engage less frequently in irrational behavior. Indeed, this observation has led Colin Camerer and his colleagues to envision a system of “asymmetric paternalism,” a type of regulation which creates large benefits for those who make errors in their decisionmaking, while imposing little cost on those who behave in a fully rational manner.<sup>72</sup> These policies are designed to help the least sophisticated groups while imposing the fewest costs on sophisticated actors.

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70. See Ron Harris & Einat Albin, Bankruptcy Policy in Light of Manipulation in Credit Advertising, 7 Theoretical Inquiries L. 431, 431 (2006) (finding credit card industry manipulates psychological biases, such as optimism, for its benefit).

71. See Timothy Egan, Newly Bankrupt Raking in Piles of Credit Offers, N.Y. Times, Dec. 11, 2005, at A1 (“This is the only industry that calls people deadbeats when they pay all their bills every month.” (quoting Ellen Schloemer, a researcher at the nonprofit Center for Responsible Lending)).

72. Colin Camerer et al., Regulation for Conservatives: Behavioral Economics and the Case for “Asymmetric Paternalism,” 151 U. Pa. L. Rev. 1211, 1212 (2003); see also Ted O’Donoghue & Matthew Rabin, Procrastination in Preparing for Retirement, in Behavioral Dimensions of Retirement Economics 125, 129 (Henry J. Aaron ed., 1999) (designating same concept as “cautious paternalism”).

Camerer also argues that a variety of decisionmaking errors identified in behavioral economic studies “may expand the scope of paternalistic regulation.”<sup>73</sup> This would result in a broader category of interventions than those supposedly libertarian policies, which must allow opt out or, as Thaler and Sunstein see it, where costs are kept near zero (p. 249). While liberals may consider such government functions to be integral, they clearly do not resonate with a libertarian vision. Thus, although the insights of behavioral economics are invaluable for better policies, the heuristic of libertarianism simply distorts this broader liberal vision.

2. *Paternalism and the Distorting Implications of Focusing on Individual Will and Welfare.* — The inclusion of the term “paternalism” in the call for regulatory intervention is similarly confusing and can be read to be either too broad or too narrow in the context of policymaking. Even if one agrees with *Nudge*’s definition of paternalism as simply a method for improving decisions made by the individual decisionmakers themselves (p. 5), good governance must also be interventionist in that it sets goals and processes for the individual and collective good. Regulation is not, however, necessarily paternalistic in the sense of guiding choices against an individual’s own will, but for their own good. An overly broad definition of paternalism might encompass any collective effort to improve people’s welfare and well-being. Although some extreme libertarians may subscribe to this broad definition, from a liberal perspective such definition is simply circular and meaningless.<sup>74</sup> Life in a society entails ordering. A central role of law is a coordination function. Goals need to be ordered and mediated, conflicts need to be resolved, and shared goals must be planned and realized in order to make civic life more livable. Behavioral economics teaches that individuals have conflicting long-term and short-term desires, global principles, and immediate choices. Moreover, most of our actions are not merely self-regarding but also affect our environment, family, and neighbors.<sup>75</sup> Even when one is committed to the primacy of personal responsibility and individual choice, most of us recognize that our responsibilities extend beyond narrow commitments to the individual self. Individuals are responsible for their own economic and emotional well-being. At the same time, we operate in a society that binds us together through cooperation, norms, and rules for settling conflicts. Market capitalism depends on a well-functioning government and legal system. Policy most often entails a balance between individual and collective responsibilities.

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73. Camerer et al., *supra* note 72, at 1211–12.

74. For example, we generally do not think involuntary submission to criminal law is paternalistic. Individuals would have agreed *ex ante* upon such a system as a general rule.

75. See J.D. Trout, *A Restriction Maybe, but Is It Paternalism? Cognitive Bias and Choosing Government Decision Aids*, 2 N.Y.U. J.L. & Liberty 455, 459 (2007) (providing motorcycle helmets requirements as an example of regulation aimed at behavior with far-reaching consequences).

Many of the suggestions promoted in *Nudge* for better health, safety, and financial security can be explained by externalities and third-party effects rather than in paternalistic terms. For instance, the regulation of pollution (pp. 183–96) is desirable because polluters not only impose costs on their own surroundings and health, but also harm others around them as well as future generations. Furthermore, pollution depletes public funds allocated for environmental recovery, insurance, and social welfare. Public programs and services such as the provision of healthcare

(pp. 207–14) must face the challenge of solving intractable social problems riddled with tradeoffs and multiple goals.<sup>76</sup> Such programs are designed not solely to benefit individuals, but also because they embody good policies for market stability in the long run and buffer the risks that affect the shared goals of a capitalist society. Programs inevitably entail tradeoffs between arrangements promoting more choice and those promoting more effective delivery. Regardless of the manner in which such tradeoffs are resolved, facilitating improved decisionmaking may reduce costly inefficiencies and yield better outcomes.

In sum, the lessons brought to us in *Predictably Irrational* and *Nudge* are highly valuable in the search for appropriate forms of government intervention. At the same time, if the goal is to promote effective policymaking and to help people best improve their decisionmaking processes and welfare, we caution against using the ideologically loaded marketing formula of *nudge* = *paternalism* + *libertarianism*. The above concerns, while by no means detrimental to *Nudge*'s overarching argument that effective regulation is both needed and possible, require consideration and nuanced responses. Although we question the pairing of libertarianism with paternalism as a beacon for policy, we share *Nudge*'s commitment to enhancing individual choice in regulatory design as well as its preference for regulatory approaches that leave a large degree of flexibility and agency for regulated parties. While human preferences can be a moving target, one feature of individual preferences is well established in the behavioral literature: Individuals value the ability to control their lives, paths, and choices.

The fact is that human beings come into the world with a passion for control, they go out of the world the same way, and research suggests that if they lose their ability to control things at any point between their entrance and their exit, they become unhappy, helpless, hopeless, and depressed.<sup>77</sup> Just as voluntariness, agency, and choice are matters of degree, there are no bright lines between coercive intervention and mere

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76. Indeed, *Nudge* itself points to important questions that need to be addressed when assessing the incentives inherent in policies and why markets may not be efficient when incentive conflicts exist. To identify such conflicts, one may ask whether the user, chooser, and payer are the same entity and which one profits from the transaction in a particular context. When the user, chooser, and payer are different actors, conflicts may arise. The simplest example is ordering food at a restaurant when someone else foots the bill. More complicated examples exist in the healthcare system in which the public and private sectors interact and where the various actors (patients, doctors, pharmacists, hospital administrators, pharmaceutical companies, lawyers, and the government) have different incentives. Given that in most contexts, people have conflicting interests, the problem of distribution and tradeoffs is pervasive. For a discussion of competing incentives in the healthcare industry, see Michael J. Graetz & Jerry L. Mashaw, *True Security: Rethinking American Social Insurance* 127–42 (1999).

77. Gilbert, *Stumbling*, supra note 4, at 22.

“soft” guidance by the state.<sup>78</sup> There are, however, real and important differences among education, manipulation, and coercion.<sup>79</sup>

As we have seen, several related yet distinct jurisprudential claims follow from the behavioral field and should serve policymakers in their attempts to improve law and regulation. First, in many instances some form of government intervention is inevitable in functioning markets and societies. Second, freedom is not equivalent to unlimited choice and our preferences are evolving, adaptive, and often inconsistent even within the same subject in a particular moment. Third, policy can be improved dramatically by expanding the tools of regulation (to include, for example, setting defaults, promoting feedback, expecting and planning for errors, and giving recommendations) and adjusting governance to correct for certain biases in decisionmaking.

The following section describes recent experimentation by policymakers with such tools in various regulatory fields. The proposals set forth by “new governance”<sup>80</sup> scholars and by the authors of *Nudge* and their collaborators have distributional, outcome, and incentive effects, but they achieve these effects in a much less rigid and choice-limiting way than traditional command-and-control regulation.

B. *New Governance Approaches to Law and Policy: From Command and Control to “Collaborative Placebos”*

Predictions about human irrationality must inform both the adoption and implementation of law and policy. Increasingly, legislators, administrators, and courts draw on behavioral insights. In recent years, both in practice and in scholarly inquiry, new approaches to regulation, often collectively referred to as “new governance,” have become a key area of experimentation. New governance approaches aim to bring together insights from interdisciplinary research on regulation and the changing demands of a new global economy.<sup>81</sup> These new regulatory approaches address concerns about the inefficiency of traditional regulation and the continuing need for public response to social challenges. New governance scholars have a different starting point than behavioral law and economic scholars. While the latter begin with the limits of indi-

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78. Thaler and Sunstein are certainly not unaware of possible critiques. In the last section of *Nudge*, Thaler and Sunstein respond to possible objections to their theory. In particular, they respond to the slippery slope argument, which, we agree with Thaler and Sunstein, is not a very compelling one (pp. 236–38). Although they concede that there are “no hard-and-fast stopping points” for libertarian paternalism (p. 248), slippery slope arguments can be made against any proposal in any political direction—and particularly against any suggestion of regulation by design.

79. Thaler and Sunstein hint at this point, defending choice architecture as distinguishable from manipulation and coercion based on existence of low-cost opt outs (pp. 236–37).

80. See supra note 2 (discussing “new governance” area of regulatory studies).

81. See Lobel, *Renew Deal*, supra note 2, at 355–58 (describing new governance approaches as stemming from developments in political economy and legal thought).

vidual choice, new governance scholars begin with the limits of traditional regulation. In the end, however, the two circles of scholarship find themselves in similar territories; much like individual decisionmaking, law is a problem solving venture.<sup>82</sup> Both public and private ordering is imperfect, prone to various biases and systemic failures. Thus, improved decisionmaking becomes both a goal for regulation and a challenge for regulators, who are themselves decisionmakers with human fallibility. This section describes the emerging field of new governance and the various ways in which it builds on behavioral insights and calls for improved regulatory design. In particular, it discusses the shift from command-and-control regulation to more collaborative public-private standard setting.

New governance approaches have received various expressions and terms in the law and regulation literature, signifying the myriad of recent regulatory approaches designed to enhance problem solving, self-regulation, and government-industry cooperation.<sup>83</sup> Instead of focusing on

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82. See William H. Simon, *Solving Problems vs. Claiming Rights: The Pragmatist Challenge to Legal Liberalism*, 46 *Wm. & Mary L. Rev.* 127, 177–78 (2004) (explaining that most legal problems cannot be solved through analytical or textual interpretation, and thus solutions must be derived creatively and experimentally).

83. See generally Lobel, *Paradox*, *supra* note 57 (describing limits of extralegal activism); Lobel, *Renew Deal*, *supra* note 2 (discussing emergence of “new governance” paradigm in regulatory theory and practice). For various terminologies within new governance, see Ian Ayres & John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* 4–5 (1992) (describing “responsive regulation”); John Braithwaite, *Restorative Justice and Responsive Regulation* 29–30 (2002) (same); Archon Fung & Erik Olin Wright, *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance* 3–6 (2003) (describing “participatory governance”); Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 *Colum. L. Rev.* 267, 267–68 (1998) (describing “democratic experimentalism” as a form of new governance wherein citizens and agencies use their local knowledge to adapt goal-oriented standards to unique circumstances); Daniel A. Farber, *Revitalizing Regulation*, 91 *Mich. L. Rev.* 1278, 1278 (1993) (describing “revitalizing regulation” as a shift from Reagan-era minimalism toward integrated models of regulation that adopt conservative principles to achieve liberal ends); Alberto Febbrajo & Gunther Teubner, *Introduction to State, Law, and Economy as Autopoietic Systems: Regulation and Autonomy in a New Perspective* 3, 11–13 (Gunther Teubner & Alberto Febbrajo eds., 1992) (describing “reflexive law”); Jody Freeman, *Collaborative Governance in the Administrative State*, 45 *UCLA L. Rev.* 1, 1–2 (1997) (describing “collaborative governance” as involving “problem solving, broad participation, provisional solutions, the sharing of regulatory responsibility across the public-private divide, and a flexible, engaged agency”); Neil Gunningham & Darren Sinclair, *Regulatory Pluralism: Designing Policy Mixes for Environmental Protection*, 21 *Law & Pol’y* 49, 49 (1999) (describing “regulatory pluralism”); Kimberly D. Krawiec, *Cosmetic Compliance and the Failure of Negotiated Governance*, 81 *Wash. U. L.Q.* 487, 489–90 (2003) (describing how “negotiated governance” models may improve efficiency in regulation and litigation by promoting interaction between agencies and regulated parties); Ralf Rogowski & Ton Wilthagen, *Reflexive Labour Law: An Introduction*, *in* *Reflexive Labour Law: Studies in Industrial Relations and Employment Regulation* 1, 1–7 (Ralf Rogowski & Ton Wilthagen eds., 1994) (describing “reflexive law”); Gunther Teubner, *After Legal Instrumentalism? Strategic Models of Post-Regulatory Law*, *in* *Dilemmas of Law in the Welfare State* 299, 305 (Gunther Teubner ed., 1986) (describing post-regulatory law); David M. Trubek & Louise G. Trubek, *Hard and Soft Law in the*

substantive prohibitions and adversarial enforcement, new governance approaches attempt to actively involve firms in the legal process, including the processes of interpreting and complying with legal norms. Jason Solomon recently described new governance approaches in this way:

Think about new governance regulation as an umbrella term covering a kind of interaction between the state, regulated entities, and other stakeholders that has a number of desiderata—public participation, data provision, transparency, benchmarking, sharing of best practices, fora for deliberation on ends and means, and autonomy and flexibility for those subject to regulation.<sup>84</sup>

Many of the behavioral insights emphasized in *Predictably Irrational* and *Nudge* confirm the importance of self-regulatory mechanisms rather than traditional top-down command-and-control regulation. Default design is one possible tool of new governance approaches to regulation. Other tools include asking actors to give reasons or set their own reflexive processes, self-monitoring, self-checks, reason-giving requirements, and preventative measures such as training, data collection, and continuing education.<sup>85</sup> All of these approaches resonate with many of *Nudge's* ideas

Construction of Social Europe: The Role of the Open Method of Co-ordination, 11 Eur. L.J. 343, 343–44 (2004) (describing “soft law” and possible interactions between traditional “hard law” and new governance “soft law”).

84. Jason M. Solomon, Law and Governance in the 21st Century Regulatory State, 86 Tex. L. Rev. 819, 834 (2008) (reviewing Law and New Governance in the EU and the US (Gráinne de Búrca & Joanne Scott eds., 2006) and Lisa Heinzerling & Mark V. Tushnet, The Regulatory and Administrative State: Materials, Cases, Comments (2006)).

85. See Lobel, Renew Deal, *supra* note 2, at 371–407 (delineating elements of new governance model as including increased participation of nonstate actors, stakeholder collaboration, diversity and competition, decentralization and subsidiarity, integration of policy domains, flexibility and noncoerciveness, adaptability and dynamic learning, and legal orchestration among proliferated norm-generating entities); David Zaring, Best Practices, 81 N.Y.U. L. Rev. 294, 323–24 (2006) (describing how “best practice” regimes may have effect of reducing transaction costs of rulemaking). Another good example of the synergy between private standardization, monitoring efforts, and government agencies is the use of information or disclosure regimes as policy tools which allow choice and participation. Paula J. Dalley, The Use and Misuse of Disclosure as a Regulatory System, 34 Fla. St. U. L. Rev. 1089, 1094 (2007) (describing disclosure as “essential to the functioning of the capital markets because ‘the most efficient allocation of resources will occur when the information is sufficient for the purposes of those making decisions, when it is reliable, and when it is disseminated in a timely manner’” (quoting H.R. Rep. No. 98-910, vol. 1, at 563, 574–75 (1977))); William M. Sage, Regulating Through Information: Disclosure Laws and American Health Care, 99 Colum. L. Rev. 1701, 1707–10 (1999) (describing disclosure-based regulations in health care). In areas as diverse as securities regulation, banking and loan management, environmental safety, health care, pharmaceuticals, and consumer protection, the availability of information on performance, rates, and quality is required by regulatory agencies for the use of interested stakeholders and is understood as a way to generate better practices. For example, the European Union has formalized social and environmental reporting and disclosure obligations as a matter of corporate law. Douglas A. Kysar, Sustainable Development and Private Global Governance, 83 Tex. L. Rev. 2109, 2158–59 (2005) (describing how formalizing obligations in environmental disclosure typically requires nothing beyond providing relevant information to nonstate

about feedback systems, recommendation, and the expectation of errors by policymakers. They also resonate with the deeper lessons of *Predictably Irrational* and *Nudge* about human judgment, motivation, and decisionmaking.

Building on behavioral insights about motivation and social norms, agencies are seeking ways to foster a culture of compliance within the private sector. To put a twist on a recent behavioral subfield, the emphasis on public-private cooperation and self-compliance in the shadow of the law serves as a “collaborative placebo,” triggering an ethos of voluntariness while maintaining background rules of command. “Cooperation instead of adversarialism” has thus become the motto of administrative agencies in the past decade, and they have carried this out by experimenting with shifts from extensive elaboration of prohibitive standards and high rates of inspection to facilitation of self-regulation and programs of collaborative, semivoluntary compliance.<sup>86</sup> Agencies enlist private corporations to actively self-regulate, by identifying problems and risks and formalizing possible solutions. In turn, the agency offers consultation and assistance, practical and reputational rewards through safe havens, flexibility and variance accommodation, and the public certification of responsible practices.<sup>87</sup> Looking at business regulation around the world, John Braithwaite and Peter Drahos have recently described the “rise of a ‘new regulatory state’, where states do not so much run things as

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actors, who in turn promote beneficial standards of behavior). In the United States, environmental information disclosure initiatives such as the Federal Toxic Release Inventory Program require firms to report their environment-related activities to the Environmental Protection Agency, which then posts the data on the internet for use by industries, consumers, and nongovernmental groups. Envtl. Prot. Agency, What Is the Toxic Release Inventory (TRI) Program?, at <http://www.epa.gov/tri/triprogram/whatis.htm> (last updated Mar. 31, 2008) (on file with the *Columbia Law Review*). In other words, government provides incentives for self-implementation programs and encourages private participation by disseminating information to the public. Even when imposed by regional or national law, corporate social and environmental reporting still constitutes a significant departure from conventional command-and-control mechanisms. In a disclosure regime, the state mandates only that information be provided to private actors and assumes the information will cause those actors to behave in a socially desirable way. Government can serve the coordinating role of initiating industry groups to share data and learn about systemic failures. *Nudge*'s insights are invaluable for improving these approaches to account for the differences between Humans and Econs, as the average consumer will find it difficult to rationally rely on the dissemination of large amounts of data without the aid of central framing and correction of various human biases in information processing.

86. See Orly Lobel, Interlocking Regulatory and Industrial Relations: The Governance of Workplace Safety, 57 Admin. L. Rev. 1071, 1089–91 (2005) [hereinafter Lobel, Interlocking] (using OSHA's burdensome regulations and surprise inspections to illustrate limits of top-down regulation in inducing compliance).

87. See *id.* at 1090–92 (arguing that adversarial regulatory frameworks cannot fully utilize these long-term incentives as a means of increasing compliance); see also Jody Freeman & Daniel A. Farber, Modular Environmental Regulation, 54 Duke L.J. 795, 815 (2005) (describing how market-based incentives may lead some industries to provide agencies with information that they normally would not reveal).

regulate them or monitor self-regulation.”<sup>88</sup> In other words, the focus is on providing “nudges” in the form of carrots, information, design, and processes, rather than rigid commands and sticks.

New governance theory views adversarial commands as potentially counterproductive. Behavioral insights about social norms and motivation indicate that adversarialism reduces the willingness of companies and individuals to share information and to engage in mutually beneficial problem solving.<sup>89</sup> In order to allow for such continuous improvement through the self-monitoring of corporations, government regulations can be phrased as standards and norms rather than rigid rules and commands. In fact, regulations are often deliberately ambiguous and open to multiple interpretations. Instead of regulating the details of behavior, agencies increasingly use broad policy goals such as “risk management” and allow the regulated industries to implement and interpret these mandates.<sup>90</sup> These initiatives also build on the insight, discussed in the previous section, that law has a norm-generating value in addition to its direct control over individuals and corporations. The law offers principled reasons and justifications for action beyond its direct tangible prohibitions and results.<sup>91</sup> In other words, the regulatory regime creates a relational contract between government and industry that in turn supports the generation of private norms.<sup>92</sup> In fact, an important lesson that is underplayed in both books reviewed here is that ends and means of our actions and choices are inextricably linked;<sup>93</sup> not simply preferences, but also principles and values are contingent on our environments and experiences.

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88. John Braithwaite & Peter Drahos, *Global Business Regulation* 28 (2000).

89. Lobel, *Interlocking*, *supra* note 86, at 1090 (“The exclusive focus on enforcement impedes the ability of industry to consult with regulators as expert authorities. Firms are more reluctant to share information on cost reduction and innovative techniques. They are also reluctant to freely deliberate with the agency in order to find mutually beneficial solutions.”).

90. See Kenneth A. Bamberger, *Regulation as Delegation: Private Firms, Decisionmaking, and Accountability in the Administrative State*, 56 *Duke L.J.* 377, 380 (2006) (explaining broad delegation allows regulated industries to better interpret norms in local context, leaving them free to select appropriate response).

91. See Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 *U. Pa. L. Rev.* 1503, 1513 (2000) (describing laws as matters of “external normative judgment” that are judged according to their effects rather than any articulated rationales); Cass R. Sunstein, *On the Expressive Function of Law*, 144 *U. Pa. L. Rev.* 2021, 2022 (1996) (“Many people support law because of the statements made by law, and disagreements about law are frequently debates over the expressive content of law.”).

92. Cf. Robert McMaster & John W. Sawkins, *The Contract State, Trust Distortion, and Efficiency*, 54 *Rev. Soc. Econ.* 145, 149–56 (1996) (“Trust removes the requirement for exchanges to be protected by sophisticated governance arrangements.”).

93. See William H. Simon, *Toyota Jurisprudence: Legal Theory and Rolling Rule Regimes*, in *Law and New Governance in the EU and the US* 37, 64 (Gráinne de Búrca & Joanne Scott eds., 2006) [hereinafter Simon, *Toyota*] (arguing for pragmatic link between policy ends and means).

New governance scholarship has acknowledged this new meaning of rule following, in which individuals are expected to rewrite the rules that apply to them and exercise discretion.<sup>94</sup> The recognition that ends and means are inevitably intertwined further illustrates why policy design, even when allowing for choice, is inherently normative. Unlike the misleading term “libertarian paternalism,” new governance scholarship embraces the normative nature of policymaking and unabashedly recognizes the values embedded in the range of regulatory tools.<sup>95</sup>

*C. Policy in Service of Institutional Reform: Layered Design and Sequenced Regulation*

An important aspect of new governance approaches is the focus on organizational cultures. Alongside behavioral economics which studies individual behavior, judgment, and decisionmaking, the fields of organizational behavior and the sociology of institutions provide lessons for regulators about the impact of internal processes on compliance. Empirical evidence indicates that institutional culture and design have a significant impact on the likelihood that individuals will engage in unlawful behavior.<sup>96</sup> For example, in the discrimination context, policymakers increasingly recognize that “[e]mployers’ organizational choices can both facilitate and constrain the development of discriminatory work cultures.”<sup>97</sup> As a result, the Equal Employment Opportunity Commission (EEOC) and some state civil rights agencies have recently guided workplaces to engage in prevention through antidiscrimination training programs, guidelines, internal reporting channels, and self-monitoring.<sup>98</sup> Similarly,

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94. See Charles F. Sabel & William H. Simon, *Destabilization Rights: How Public Law Litigation Succeeds*, 117 Harv. L. Rev. 1016, 1019 (2004) (explaining that experimentalist approaches tend to set more “flexible and provisional norms,” leaving parties considerable discretion in how to achieve their goals).

95. Orly Lobel, *Setting the Agenda for New Governance Research*, 89 Minn. L. Rev. 498, 502 (2004) (“Governance scholars recognize that the traditional structures of liberal democracy are limited in both their effectiveness and legitimacy. However, they refuse to abandon the role of an active state in a democracy.” (footnotes omitted)).

96. See Jennifer Arlen & Reinier Kraakman, *Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes*, 72 N.Y.U. L. Rev. 687, 692–93 (1997) (showing how imposing different levels of liability upon firms can influence company culture and employee behavior); Yuval Feldman & Orly Lobel, *Decentralized Enforcement in Organizations: An Experimental Approach*, 2 Reg. & Governance 165, 171–81 (2008) (demonstrating impact of institutional processes on individual decisions about whether to blow whistle on illegality); Canice Prendergast, *The Provision of Incentives in Firms*, 37 J. Econ. Lit. 7, 55 (1999) (illustrating that behavior of agents changes with incentives).

97. Tristin K. Green, *Work Culture and Discrimination*, 93 Cal. L. Rev. 623, 650 (2005).

98. See Susan Sturm, *Second Generation Employment Discrimination: A Structural Approach*, 101 Colum. L. Rev. 458, 555 (2001) (proposing courts prescribe and give legitimacy to general norms while allowing private actors to discuss and interpret these norms); Julie Chi-hye Suk, *Antidiscrimination Law in the Administrative State*, 2006 U. Ill. L. Rev. 405, 450–51 (discussing Commission for Racial Equality’s effective use of self-monitoring techniques to reduce workplace discrimination).

the Occupational Safety and Health Administration (OSHA) offers certification for private companies as beyond compliance members and assistance from OSHA officials if the companies are willing to identify, investigate, and monitor their own safety risks and near-miss accidents.<sup>99</sup>

These programs—where the regulated parties can opt out from the regular command-and-control regime if they can show that their self-monitoring is effective—are similar to the individual opt-out schemes envisioned by *Nudge* (pp. 248–51). Both use choice architecture to present a choice in a way that will encourage ethical behavior. Cooperative compliance is currently introduced in diverse fields of regulation ranging from hazardous substance regulation,<sup>100</sup> food safety control,<sup>101</sup> endangered species regulations,<sup>102</sup> civil rights compliance,<sup>103</sup> tax programs,<sup>104</sup> and securities regulation.<sup>105</sup> These cooperative programs should not be confused with “deregulation” or “libertarian” noncoerciveness. The warning in the previous section about the distorting effects of *Nudge*’s term “libertarian paternalism” to describe third-way regulatory approaches deserves repeated emphasis. New governance relies on the idea of “enforced self-regulation,” indicating that a first step of regulation is for the regulated parties to order themselves. At the second stage, the regulatory agency negotiates particularized regulations with individual firms, with the threat of a third stage of less tailored and more coercive rules if the firm fails to self-enforce and cooperate with the agency.<sup>106</sup> Ayres and Braithwaite illustrate this scheme with an advanced regulatory pyramid, where self-regulation constitutes the base of the pyramid with escalated forms of control (command regulation and punishment) at the top.<sup>107</sup> Similarly, in the context of reporting wrongdoing, a sequenced

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99. Lobel, *Interlocking*, supra note 86, at 1104–11.

100. See Freeman & Farber, supra note 87, at 798–99 (explaining that environmental regulation requires not only participation of multiple levels of government, but also active involvement of key stakeholders).

101. See Simon, *Toyota*, supra note 93, at 55–56 (discussing new regulatory approaches to food safety plans that “requir[e] regulated actors to identify hazards of particular kinds and to formulate their own plans for dealing with them”).

102. See Craig W. Thomas, *Habitat Conservation Planning*, in Fung & Wright, supra note 83, at 144, 145–50 (describing cooperative Habitat Conservation Plans that satisfy requirements of the Endangered Species Act).

103. See Lauren B. Edelman et al., *The Endogeneity of Legal Regulation: Grievance Procedures as Rational Myth*, 105 *Am. J. Soc.* 406, 414–18 (1999) (describing discrimination-related grievance procedures internal to organization).

104. See Sagit Leviner, *A New Era of Tax Enforcement: From ‘Big Stick’ to Responsive Regulation*, 42 *U. Mich. J.L. Reform* (forthcoming 2008) (manuscript at 42, on file with the *Columbia Law Review*) (discussing central role of cooperation in Australian Tax Office enforcement strategy).

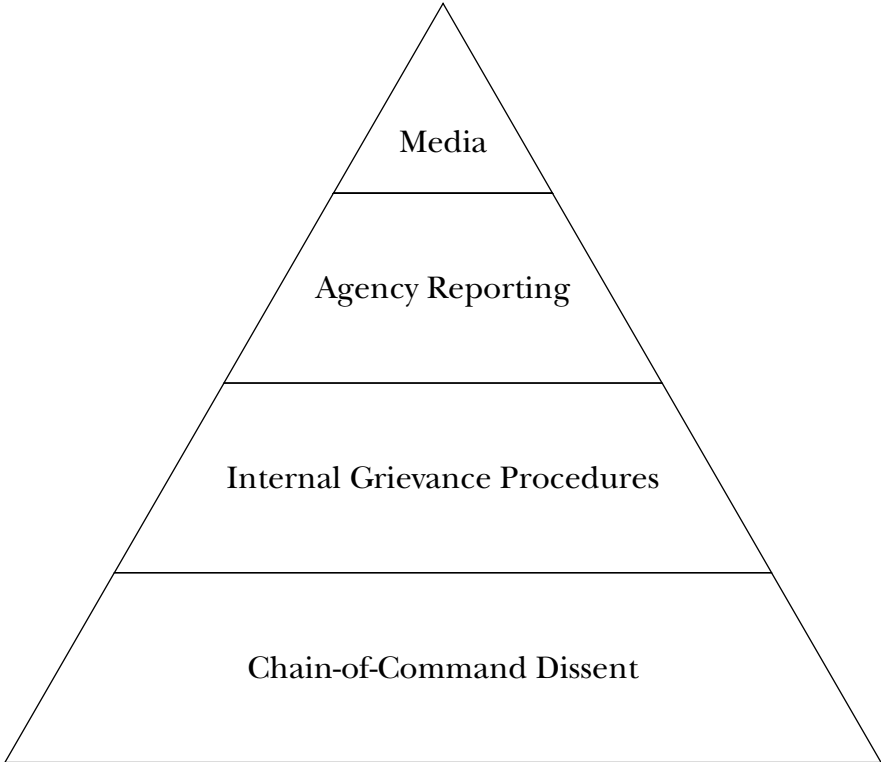
105. See Cristie L. Ford, *New Governance, Compliance, and Principles-Based Securities Regulation*, 45 *Am. Bus. L.J.* 1, 3–5 (2008) (describing British Columbia’s model of “outcome-oriented” securities regulation).

106. See Ayres & Braithwaite, supra note 83, at 35–41 (discussing escalating nature of stages of enforcement).

107. *Id.* at 39 fig.2.3.

reporting system will allow organizations to first require their members to report illegal behavior within the internal reporting channels of the company. Only if internal problem solving fails will individuals be allowed to turn to public channels for whistleblowing (Figure 2).<sup>108</sup> In this sense, government administrators are indeed charged with the role of “public choice architects,” but the architecture is a 3-D structure rather than the flatter “libertarian paternalism” suggested in *Nudge* (pp. 4–6).

FIGURE 2: THE REPORTING PYRAMID<sup>109</sup>



After Enron and other recent corporate scandals, Securities and Exchange Commission Chairman William Donaldson declared that “the most important thing that a Board of Directors should do is determine the elements that must be embedded in the company’s moral DNA, as one might call it.”<sup>110</sup> He continued by explaining

108. Orly Lobel, *Citizenship, Organizational Citizenship and the Laws of Overlapping Obligations*, 97 Cal. L. Rev. (forthcoming 2009) (manuscript at 55, on file with the *Columbia Law Review*), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1114924](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1114924) [hereinafter Lobel, *Citizenship*].

109. *Id.* at 55 fig.1.

110. William H. Donaldson, Chairman, U.S. Sec. & Exch. Comm’n, Remarks Before the Economic Club of New York (May 8, 2003), available at <http://www.sec.gov/news/speech/spch050803whd.htm> (on file with the *Columbia Law Review*).

In humans, DNA encompasses the very building blocks of life and determines or influences almost every aspect of our physical development. So too should the moral DNA of a company . . . . As we move past Sarbanes-Oxley and the requirements, rules and regulations that have come in its wake, it's essential that corporate boards look beyond the letter of the law and be ever mindful of the spirit of the reforms.<sup>111</sup>

The idea of “organizational DNA” finds support in recent behavioral economics and social psychology literature.<sup>112</sup>

*Predictably Irrational's* findings about dishonesty, which imply that regular people will steal office supplies or food from a common room, but would not steal the equivalent value of the items in cash, are exactly the type of evidence of the influence of framing effects on compliance that new governance scholars and administrative agencies are seeking (p. 195).<sup>113</sup> Ariely's own experiments on the dishonesty of honest people provide groundbreaking findings about the role of choice architecture and design for the regulation of conduct.<sup>114</sup> Such findings may bear on the ubiquity of accounting-related frauds or stock-related embezzlements. In fact, legal rules and penalties, like monetary incentives, are a double-edged sword. They can motivate compliance, but beyond a certain level, they may backfire. In Ariely's words, “[W]e live in two worlds: one characterized by social exchanges and the other characterized by market exchanges. And we apply different norms to these two kinds of relationships” (p. 76). Closely related is Ariely's finding about the introduction of a medium, such as poker chips or accounting symbols, that enables distancing oneself from the illegal conduct, thus increasing the incidences of noncompliance (pp. 220–21). The effects of distance on morality have been established previously—such as when companies are involved in production chains.<sup>115</sup> Increasing the visibility and salience of one's noncompliance can be a form of regulatory enforcement that relies more on human motivation than on external government monitoring. New governance emphasis on self-monitoring, training, internal adoption of codes of conduct and ethical rules, and reporting processes within cor-

111. *Id.*

112. Lobel, *Citizenship*, *supra* note 108, at 31; see also Elliott Sober & David Sloan Wilson, *Unto Others: The Evolution and Psychology of Unselfish Behavior* 173 (1998) (“[S]ocial norms function largely . . . to make human groups function as [biologically] adaptive units . . .” (emphasis omitted)).

113. For a discussion of these findings, see *supra* Part I.A.

114. As discussed in *Predictably Irrational*, Ariely and his collaborators found that when people are asked to either recall the Ten Commandments or to sign an institutional honor code, they act more honestly in the immediate short period that follows, even when there is no chance of being caught or of being rewarded for honesty (pp. 212–13). On the other hand, the experiments show that when compensation comes in a medium other than money, dishonesty is likely to increase and be more prevalent (pp. 220–21).

115. See Lobel, *Interlocking*, *supra* note 86, at 1094 (noting moral gap created by distancing oneself from responsibility has led some companies to avoid properly training workers in order to avoid legal liability).

porations resonate with these findings about priming and increasing the salience of the importance of compliance as regulatory tools.

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The bridge between new governance scholarship and behavioral economics points to future directions for interdisciplinary research. In order to continue applying behavioral insights to create smart and lean policy, more integrated research is required.<sup>116</sup> Many of the groundbreaking behavioral economics studies are lab experiments, which lack the rich “social and organizational context” of real market interactions, and therefore have limited direct application to concrete social policy.<sup>117</sup> Moreover, behavioral economics often neglects the institutional aspects of enforcement and compliance. Integrating lessons from both lab and field experiments, as well as from the various disciplines, including economics, psychology, sociology, and organizational behavior, into meaningful data is therefore a central challenge for regulatory agencies. Further, *Predictably Irrational* and *Nudge* focus mainly on individual decisionmaking. Public policy questions, however, are characterized by the need to find adequate solutions for large groups of people with varying and often competing interests and thus with uncertainties about the best solutions.<sup>118</sup> This void between well-designed controlled experiments (either

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116. See On Amir et al., *Psychology, Behavioral Economics, and Public Policy*, 16 *Marketing Letters* 443, 447 (2005) [hereinafter Amir et al., *Psychology*] (explaining behavioral scientists who want their work translated into policy must “bridge the gap between theoretical and applied settings” and noting that “[t]aking these extra steps means not only doing more applied work, but also becoming an expert in the particular policy domains (savings, healthcare, taxes, education, police lineups, etc.)”).

117. See Feldman & Lobel, *supra* note 96, at 167 (discussing limits of behavioral experimental studies in capturing complexities of real institutions); see also Levitt & List, *supra* note 19, at 909–10 (“To be empirically relevant, the anomalies that arise so frequently and powerfully in the laboratory must also manifest themselves in naturally occurring settings of interest.”). Some behavioral studies are also identity-blind and do not attempt to distinguish between different groups and their degree of “stumbling.” This raises other questions that Ariely, Thaler, and Sunstein largely do not touch upon, such as, what if individuals of one sex are more prone to irrationalities in various policy fields than those of another sex? On evidence of gender differences in economic behavior, see Uri Gneezy et al., *Performance in Competitive Environments: Gender Differences*, 118 *Q.J. Econ.* 1049, 1050, 1056 (2003) (testing “whether men and women differ in their ability or propensity to perform in competitive environments” and finding “the performance of men is significantly higher” in mixed tournaments).

118. See Michael C. Dorf, *After Bureaucracy*, 71 *U. Chi. L. Rev.* 1245, 1269 (2004) (“[I]n the conditions of modern life, people increasingly find that their problem is not so much an inability to persuade those with different interests or viewpoints of what to do; their problem is that no one has a complete solution to what collectively ails them.”). A related problem with current research is that, for the most part, it examines behavior only at the individual level. New governance approaches must integrate insights about individual behavior with the study of groups and organizations. These latter areas of study are less developed in the books we review, although there is a growing body of interdisciplinary literature on group behavior. See, e.g., Samuel Issacharoff, *Democracy and Collective Decision Making*, 6 *Int’l J. Const. L.* 231, 233 (2008) (placing “the difficulty

in the field or in the lab) and concrete policy questions can be bridged by both making the experimental context closer to the particular policy question at hand and by conducting experiments with the policies themselves.<sup>119</sup> A final key task for the next stages of law and behavioral studies is delimiting the contexts and spheres of action in which individuals behave irrationally and those in which experience, expertise, information, and incentives have elevated market actors close to the status of true “Econs,” and relating such micromodels to their macroconsequences.

## CONCLUSION

*Predictably Irrational* and *Nudge* represent important developments in the field of behavioral economics and illustrate potential implications of these developments for law and policy. The observation that people make imperfect decisions is well established in both books, and the failures described consist of a broad range of behaviors and underlying cognitive mechanisms. Individuals have limited information, are limited in their capacity to process large quantities of data, and have limited attention spans, calculation capacities, and memory resources. Humans are also limited in their willpower and emotional capacities. All of these fallibilities come into play in the cases examined by Ariely, Sunstein, and Thaler, but the correction mechanisms in response to each vary significantly. As this Review Essay highlighted, the biases described in the books are caused by distinctly different mechanisms, including over and under usage of cognitive process (Type 2 and Type 1 biases, respectively). Therefore, the prescriptive nature following these findings must be cautious and narrowly tailored to address each behavioral bias. Moreover, the insights for policy are broad and can greatly assist the policymaker in expanding and improving the regulatory toolbox. The behavioral insights offered by the two books support the liberal understanding that freedom is not identical to unlimited choice.

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of defining the polity . . . in the broader context of the long-standing theoretical uncertainty about the nature of collective decision making”). Indeed, Sunstein himself has extensively studied group decisionmaking in the judiciary. Cass R. Sunstein et al., *Are Judges Political? An Empirical Analysis of the Federal Judiciary* (2006) (studying multi-judge panel decisionmaking); David Schkade, Cass R. Sunstein & Reid Hastie, *What Happened on Deliberation Day?*, 95 *Cal. L. Rev.* 915 (2007) (studying effects of group deliberation by like-minded people); Cass R. Sunstein, *Deliberative Trouble? Why Groups Go to Extremes*, 110 *Yale L.J.* 71, 84 (2000) (describing “social cascades” that lead opinions on legal issues to run according to community norms and reputational considerations); Cass R. Sunstein, David Schkade & Lisa M. Ellman, *Ideological Voting on Federal Courts of Appeals: A Preliminary Investigation*, 90 *Va. L. Rev.* 301, 337–46, 352 (2004) (finding strong correlation between political party of appointing president and judicial voting patterns, with judicial votes often turning on panel’s political composition).

119. See Amir et al., *Psychology*, *supra* note 116, at 451–52 (urging experimenters to “directly do research on policy” to bridge “the existing gap between behavioral research and policy”).

*Predictably Irrational* and *Nudge* will prove a most valuable contribution to the legal academy, practitioners, and policymakers and will continue to generate fascinating debates in the legal community for many years to come. The discrete proposals in the books provide the basis for a rich set of reforms in a myriad of legal fields. The books contain invaluable insights into the psychological underpinnings of judgment and decisionmaking, especially regarding monetary transactions and decisions involving risk and uncertainty. The broader message of *Predictably Irrational* and *Nudge* should appeal to policymakers and thinkers from diverse backgrounds. There is more yet to be done in applying empirical methods from economics and psychology to better understand individual and group behavior in the market and in civil life. Insights on human behavior and decisionmaking are vital to analyzing and improving the modern regulatory state.

