

Daniel Kahneman's Influence on Legal Theory

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The story of Daniel Kahneman's extraordinary influence on the legal academy begins in the 1960s and early 1970s, when the field of law and economics revolutionized legal theory. The field, as such, was launched by Ronald Coase's *The Problem of Social Cost*¹ and Guido Calabresi's *The Cost of Accidents*,² and it became a substantial force in the academy with the publication of the first edition of Richard Posner's famous treatise, *Economic Analysis of Law*.³ The seminal insight of law and economics was very simple and straightforward, but at the same time quite powerful: like prices, laws and regulations act as incentives for behavior, and people who are subject to the law can be expected to respond to these incentives. There are a couple of important corollaries to this basic insight. One is that the law can be used to encourage socially desirable conduct and discourage socially undesirable misconduct.⁴ Another is that the law has important efficiency implications; that is, law creates costs as well as benefits, and it is important to consider both effects when evaluating its efficacy.⁵

In order to operationalize these powerful concepts, a theory concerning how exactly law will shape the behavior of the governed is necessary. For its behavioral assumptions, law and economics imported

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1. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

2. GUIDO CALABRESI, *THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* (1970).

3. RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* (1st ed. 1972). The treatise is currently in its eighth edition. Coase reminds us that Posner's wealth maximization theory has "clearly played the major role" in the growth of law and economics in the legal academy. R.H. Coase, *Law and Economics at Chicago*, 36 J.L. & ECON. 239, 251 (1993). For an extensive summary (and critique) of Posner's law and economics' theories, see David Campbell, *Welfare Economics for Capitalists: The Economic Consequences of Judge Posner*, 33 CARDOZO L. REV. 2233 (2012).

4. See generally Steven Shavell, *Law versus Morality as Regulators of Conduct*, 4 AM. L. & ECON. REV. 227 (2002) (discussing the incentives created by law and the desirability and pitfalls of relying on legal incentives to regulate societally acceptable behaviors).

5. Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rational Choice Assumption from Law and Economics*, 88 CALIF. L. REV. 1051, 1053-54 (2000).

from microeconomics the assumptions of “rational choice theory.”⁶ The thin version of rational choice theory assumes that people have fixed preferences, or ends, and that they employ optimal means to achieve their ends subject to existing constraints.⁷ This version of the theory is agnostic, however, about the content of preferences. The thick version assumes not only that people optimize, but that they possess a preference function that is entirely self-interested and, at least in market settings, revolves around maximizing financial well-being.⁸

As successful as law and economics was in shaping thought in the legal academy, its rational choice theory foundation proved problematic. That is, much of the legal academy found rational choice theory to be unpersuasive as a description of how human beings actually act.⁹ To most of us—and even to many economists—it was obvious that people often do not appear to optimize the satisfaction of their preferences, and doubly obvious that many do not zealously pursue only their self-interest, at least in many circumstances.¹⁰ Any theory that seemed to rest on such claims could not help but seem dubious.

The law and economics movement tried to finesse this problem with what I call the “Milton Friedman slight-of-hand.” Referencing Friedman’s famous statement that assumptions of economic models need not be descriptively realistic if they yield accurate predictions,¹¹ legal economists would respond to the obvious criticism that rational choice theory is implausible as a description of behavior by saying, “Yes, of course, we know that people do not actually optimize, but they

6. See generally Thomas S. Ulen, *Rational Choice Theory in Law and Economics*, in ENCYCLOPEDIA OF LAW AND ECONOMICS 790 (1999) (explaining rational choice theory and summarizing literature from psychology, economics, and other disciplines that criticized rational choice theory).

7. See Korobkin & Ulen, *supra* note 5, at 1067–68 (describing and arguing the inadequacy of the thin version of rational choice theory).

8. *Id.* at 1060–67.

9. See, e.g., *id.* at 1060–75; W. Bradley Wendel, *Mixed Signals: Rational-Choice Theories of Social Norms and the Pragmatics of Explanation*, 77 IND. L.J. 1, 26–56 (2002).

10. See generally Jeffrey L. Harrison, *Egoism, Altruism, and Market Illusions: The Limits of Law and Economics*, 33 UCLA L. REV. 1309 (1986) (arguing that law and economics, “in the form of cost-benefit or other efficiency based-analysis,” can lead to inaccurate conclusions); Allen Leff, *The Economic Analysis of Law: Some Realism about Nominalism*, 60 VA. L. REV. 451, 474–77 (1974) (casting doubt on the notion that individuals maximize utility and vigorously act out of self-interest); Frank I. Michelman, *Reflections on Professional Education, Legal Scholarship, and the Law-and-Economics Movement*, 33 J. LEGAL EDUC. 197 (1983) (arguing that “the form of consciousness and behavior posited by law and economics is only one side of the story of what people . . . are and can be like”).

11. Milton Friedman, *The Methodology of Positive Economics*, in ESSAYS IN POSITIVE ECONOMICS 3, 15 (1953).

behave *as if* they were optimizing.”¹² I always found this claim to be extremely unpersuasive. If people don’t actually optimize, then why would their behavior be consistent with optimization? Many other scholars who were otherwise interested in and persuaded by the methodology of law and economics struggled with this question as well.¹³ The conclusion is often asserted by legal economists, but never explained as a matter of deductive logic or justified with empirical data beyond pointing out the success of some very general, directional predictions, such as that demand will decline as prices increase.¹⁴

This is where the work of Daniel Kahneman, his long-time colleague Amos Tversky, and their followers become an important part of the story of law and economics. Kahneman and his colleagues taught us two important general points about decision making and human behavior that allowed the field of law and economics to begin to construct more realistic behavioral underpinnings.

First, people usually use heuristics to evaluate the world around them. Kahneman calls this “System 1” (“fast”) thinking.¹⁵ People use System 1 quite often, both when trying to understand what is happening in the world around them and when trying to determine what actions to take to achieve their goals. When faced with difficult questions about the nature of the world, people have a tendency to substitute questions that lead more easily to intuitive answers, and then to answer those easier questions. For example, rather than tackle the difficult problem of whether Ford stock is likely to be a better investment than available

12. See Amir N. Licht, *Expanded Rationality: From the Preferred to the Desirable, with Some Implications for Law*, 35 QUEEN’S L.J. 245, 246 (2009) (noting this standard response of economists to the assertion that their behavioral model is “patently unrealistic”).

13. Licht put it like this:

Milton Friedman famously argued that although the assumptions underlying economic theory should be appropriate to the particular problem being addressed, they need not capture exactly how economic actors really behave; it is sufficient that these actors behave *as if* they follow these assumptions

That age of innocence is gone. . . . [I]t would be fair to say that mainstream economics has now recognized the need to assume how people really behave.

Id. at 247.

14. See, e.g., Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1485–87 (1998) (analyzing the claim that rational choice theory provides correct behavioral predictions).

15. DANIEL KAHNEMAN, THINKING FAST AND SLOW 20–21 (2011). Professor Kahneman defines System 2 as “the conscious, reasoning self that has beliefs, makes choices, and decides what to think about what to do.” *Id.* at 21. As for the relationship between the two systems, Professor Kahneman describes System 1 “as effortlessly originating impressions and feelings that are the main source of the explicit beliefs and deliberate choices of System 2.” *Id.* The System 1/System 2 terminology was actually introduced in Keith E. Stanovich & Richard F. West, *Individual Differences in Reasoning: Implications for the Rationality Debate?*, 23 BEHAV. & BRAIN SCI. 645 (2000).

alternatives, an investor might answer the easier question of whether he thinks Ford makes good cars.¹⁶ The consequence of this is that our behaviors will not always represent the optimal means of achieving our desired ends.

This does not mean—as Professor Kahneman has quite clearly stated—that human beings are “irrational.”¹⁷ Globally, the use of System 1 reasoning is a highly rational method of coping with the huge amount of information we must confront daily. If we tried to use our logically superior but relatively ponderous “System 2” (“slow”) formal reasoning capabilities to analyze every piece of information that we come into contact with, we simply would not be able to make it through the day.¹⁸ But even though our heavy reliance on System 1 is reasonable, it has the side effect of causing us to make mistakes in judgment and behavior, in the sense that we often act in ways that are non-optimal.¹⁹

Second, our preferences are constructed based, at least in large part, on the contextual features that exists when we are called upon to determine our preferences.²⁰ This means that not only are our ends not necessarily 100 percent self-interested, but that they are not even 100 percent fixed. Preferences are not random, but they do fluctuate and vary in their intensity with changes in context.²¹

Beyond these general, fundamental insights, Kahneman and Tversky,

16. KAHNEMAN, *supra* note 15, at 12 (recalling a conversation with an investment professional).

17. *See id.* at 411 (“The definition of rationality as coherence is impossibly restrictive; it demands adherence to rules of logic that a finite mind is not able to implement. Reasonable people cannot be rational by that definition, but they should not be branded as irrational for that reason. *Irrational* is a strong word, which connotes impulsivity, emotionality, and a stubborn resistance to reasonable argument. I often cringe when my work with Amos [Tversky] is credited with demonstrating that human choices are irrational, when in fact our research only showed that Humans are not well described by the rational-agent model.”).

18. *See id.* at 21–22.

19. Jeremy A. Blumenthal, *Emotional Paternalism*, 35 FLA. ST. U. L. REV. 1, 35–36 (2007).

20. *See generally* Sarah Lichtenstein & Paul Slovic, *The Construction of Preference: An Overview*, in THE CONSTRUCTION OF PREFERENCE 1 (Lichtenstein & Slovic eds., 2006) (introducing the concept that “in many situations, we do not really know what we prefer; we must construct our preferences as the situation arises”).

21. Indeed, “we spend our lives . . . building preferences,” and “[t]hese preferences are readily available for use.” *Id.* at 1. Difficult situations arise, however, when certain decision elements are unfamiliar or when the choices available “present a conflict among our known preferences,” and even when our preferences are clear, it is difficult to “translate our positive and negative feelings into a numerical response.” *Id.* Dr. Lichtenstein and Dr. Slovic give the example of choosing between two apartments to rent; one with large windows and a view but a small kitchen, and the other with no view but a big kitchen. *Id.* In such a case, preferences for large kitchens and attractive views are not particularly helpful. While individuals may understand their preferences for individual aspects, choosing between them is problematic, and making a decision requires a “tradeoff between one aspect (view) and the other (kitchens).” *Id.*

along with many of their students and colleagues who have followed in their footsteps, taught us, and continue to teach us, about the variety of heuristics we use, when we use them, and how we use them. This body of work allows us to think more accurately and precisely about how law can be used to (1) promote the efficient allocation of resources (if that is our goal), (2) encourage certain socially desirable conduct (when that is our goal), and (3) help individuals fulfill their potential (when that is our goal). The combination of the methodology of law and economics and the behavioral insights of Kahneman and Tversky's research has produced an approach to legal theory that has come to be known as "behavioral law and economics."²² This way of thinking has won a substantial following in the legal academy, including most of the adherents of "traditional" law and economics and its rational-choice roots and many who were formerly sympathetic to the law and economics project but skeptical of its flawed behavioral assumptions.

In the early 1990s, when I began to attempt to apply some of the insights of Professor Kahneman to the analysis of legal rules within the law and economics framework, one well-known luminary in the field of law and economics (whose name I will not mention) told me that my work was interesting, but that it was not law and economics. Another luminary, as highly-regarded as the first but a bit more blunt, asked me why I was wasting my time with the "psychology stuff." Well, times have changed significantly in the last two decades. As an economist might say, the market has spoken, and the market seems to prefer the new behavioral law and economics to the traditional, rational-choice-theory law and economics. More importantly, the Kahneman-Tversky influence has helped the field of law and economics to win a larger following in the legal academy than the field traditionally enjoyed.

Here is some evidence, admittedly impressionistic. In 1998, Christine Jolls, Cass Sunstein, and Richard Thaler published *A Behavioral Approach to Law and Economics*.²³ This is the most cited law review article within the last 20 years—in any field, not just within the parameters of law and economics—and the competition is not close. No other article comes within 100 citations of that one.²⁴ Two years

22. See, e.g., RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (2008) (providing readers with what is widely considered a de facto layperson's treatise on the behavioral approach to law). For a concise and empirical recounting of the precipitous rise of the "behavioral law and economics" school of thought within legal academia, see Joshua D. Wright & Douglas H. Ginsburg, *Behavioral Law and Economics: Its Origins, Fatal Flaws, and Implications for Liberty*, 106 NW. U. L. REV. 1033, 1053–55 (2012).

23. See *supra* note 14.

24. See Russell Korobkin, *What Comes After Victory for Behavioral Law and Economics*,

later, my colleague Tom Ulen and I published *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*.²⁵ This article is the most cited law review article in any field published since the year 2000.²⁶ Of the ten most cited law review articles published since 1995, fully half of them are appropriately categorized as falling within the field of behavioral law and economics.²⁷

Professor Kahneman is not a law professor, yet his work has been cited in 2810 law journal articles.²⁸ Even more impressive, the number of citations to his work in law journals has continued on a steady upward trajectory for the last three decades,²⁹ even though his most influential articles were published in the 1970s.³⁰ Normally citations over time, even to influential articles, increase for a few years as scholars become familiar with the material and then quickly tail off.³¹ But Professor Kahneman's influence continues to grow.

To be sure, there are valid criticisms of the behavioral turn in law and economics. The first is that, because context is so important in how the mind works, behavioral law and economics analysis requires a very context-specific policy analysis.³² The optimal legal rule for protecting investors, for example, might be different than the optimal rule for

2011 U. ILL. L. REV. 1653, 1653–54 & n.6.

25. Korobkin & Ulen, *supra* note 5.

26. See Korobkin, *What Comes After Victory*, *supra* note 24, at 1654 & n.8. See also Fred R. Shapiro & Michelle Pearse, *The Most-Cited Law Review Articles of All Time*, 110 MICH. L. REV. 1483, 1489 (2012).

27. Korobkin, *What Comes After Victory*, *supra* note 24, at 1655 & n.9.

28. Result of search in the Westlaw "JLR" database for Daniel /2 Kahneman as of March 1, 2013. The same result showed thirty-three cases that cited to Kahneman's work.

29. According to the same search of the Westlaw JLR database, Kahneman's work was cited 0 times in 1982, 49 times in 1992, 100 times in 2002, and 210 times in 2012.

30. According to the Social Science Citation Index, Kahneman's two most cited articles are *Prospect Theory: Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979) (cited 8353 times) and *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124 (1974) (cited 6594 times), both co-authored with Amos Tversky.

31. See Ian Ayres & Fredrick E. Vars, *Determinants of Citations to Articles in Elite Law Reviews*, 29 J. LEGAL STUD. 427, 436 (2000) (finding that citations per year peak at 4 years after publication, and an article receives half of its expected total lifetime citations 4.6 years after publication).

32. See, e.g., Gregory Mitchell, *Tendencies versus Boundaries: Levels of Generality in Behavioral Law and Economics*, 56 VAND. L. REV. 1781, 1799 (2003) ("[T]here are few indisputable and broad tendencies when it comes to irrational behavior. As a result, it makes little sense, and can be misleading, to speak of depersonalized, decontextualized irrational tendencies."); Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1559 (1998) ("It is profoundly unclear what 'behavioral man' would do in any given situation"); Jennifer H. Arlen, *The Future of Behavioral Economics and the Law*, 51 VAND. L. REV. 1765, 1768 (1998) (arguing that behavioral economic analysis lacks a "coherent, robust, tractable model of human behavior that can serve as a basis for [policy] recommendations").

protecting the purchasers of consumer products.³³ Different contexts might cause people to use different heuristics when generating System 1 intuitions. Lawmakers cannot assume that a general policy of disclosing all information, and then letting the market work to allow people to optimize their own individual utility functions, will work in the way that traditional law and economics often assumed. You have to get down into the detail of the context if you have any hope of offering the best possible legal analysis in light of behavior.

A second problem is that System 2 reasoning is not employed to the same degree or in the same situations by all individuals or categories of individuals who are subject to the law.³⁴ So we may need different rules for some types of investors who are more capable or better trained to use System 2 analysis, than would be appropriate for investors who rely on System 1 heuristics. (But we may not—resolving such questions requires empirical research and careful thinking.)

A third problem is that, because law makers employ heuristic-based System 1 reasoning just like everybody else, the issue of comparative institutional competence will always be lurking.³⁵ In any particular context, are the mistakes in judgment that individuals subject to the law might make, causing them not to maximize their subjective expected utility, going to be worse than those that law makers might make when they are trying to design the optimal rules to help protect the people who use System 1 reasoning?

A fourth challenge, and perhaps the most daunting, is that if preferences are not fixed, but instead depend on context, how do we even determine which preference function the law should try to maximize, either for individual actors or as a matter of social welfare? To use one oft-used example, Kahneman and Tversky's "prospect theory" predicts that people will often place a higher value on things that they own than on things that they do not own because "losses loom larger than gains."³⁶ Giving up an entitlement is perceived as a cost that outweighs the benefits of obtaining the same entitlement, all other

33. In addition, some scholars have argued that regulatory protections appropriate for consumer contracts may not be appropriate in sophisticated business transactions where the parties are presumably more cognitively skilled and experienced. Korobkin, *What Comes After Victory*, *supra* note 24, at 1671 (citing Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 *YALE L.J.* 541, 544 (2003)).

34. *See id.* at 1668–71 (acknowledging that the underlying experimental work "nearly always suggests" that individuals do not "use the same heuristics or fall prey to the same decision-making biases").

35. *See id.* at 1658–59.

36. Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 279.

things being equal.³⁷ If the goal is to facilitate the efficient allocation of certain legal entitlements, it is not obvious what the appropriate baseline should be. Do we take into account the gain perspective or the loss perspective? Or do we try to take into account different perspectives depending on the positions of the individuals involved in our analysis? This issue is one I have been struggling with in my work for some years now.³⁸

Despite the difficult challenges raised and problems to be solved, I believe that behavioral law and economics is the future of law and economics, and the future of legal policy analysis more generally. If you have lost your keys in the bushes, there is simply no use searching on the sidewalk under the street lamp of rational choice theory simply because that's where the light is. You have to look in the bushes even if it is dark and the footing is treacherous. As those of us in the legal academy wade into those dark and treacherous bushes, we can and should continue to thank Professor Kahneman for giving us, at least, a powerful flashlight to help us find our way.

37. See Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 NW. U. L. REV. 1227 (2003).

38. See, e.g., *id.*; Russell Korobkin, *Inertia and Preference in Contract Negotiation: The Psychological Power of Default Rules and Form Terms*, 51 VAND. L. REV. 1583 (1998); Russell Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608 (1998); Russell Korobkin, Note, *Policymaking and the Offer/Asking Price Gap: Toward a Theory of Efficient Entitlement Allocation*, 46 STAN. L. REV. 663 (1994).