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THE LIMITS OF BEHAVIORAL DECISION THEORY IN LEGAL ANALYSIS: THE CASE OF LIQUIDATED DAMAGES

Robert A. Hillman†

Traditional legal scholarship generally involves the analysis of a set of judicial opinions to determine whether appellate courts have applied legal norms consistently, fairly, and logically. Often an analyst will call for a new approach to a problem based on the author's view of the applicable law's nature and functions. Traditional scholarship rarely brings to bear perspectives from the social sciences or other disciplines. Rather, traditional analysis depends on value judgments about what constitutes effective and fair law and policy.

At least partly in reaction to the perceived tunnel vision and subjectivity of traditional analysis,¹ legal writers have turned with enthusiasm to other disciplines to broaden their perspective. Economic analysis of law is, of course, the predominant example of legal analysts' turn to social science. By utilizing economic principles to explain and predict legal norms, the economic approach presents a largely unified, objective perspective on what the law is and what it should be.²

Notwithstanding the success of economic analysis of law, critics maintain that the approach is itself narrow and unrealistic. For example, critics assert that neoclassical economic analysis assumes too narrowly that a rational desire to "maximize welfare" as measured by an increase in wealth motivates people's decisions.³ Even some legal writ-

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¹ These criticisms of traditional legal analysis are, of course, debatable. In fact, the conclusions this paper draws in part suggest the continued vitality of this mode of analysis.

² See, e.g., ANTHONY T. KRONMAN & RICHARD A. POSNER, *THE ECONOMICS OF CONTRACT LAW* 1-5 (1979).

³ See, e.g., E. ALLAN FARNSWORTH, *CONTRACTS* 762 (3d ed. 1999) (noting that traditional economic theory "presupposes rational parties that strive to maximize their own welfare"). According to neoclassical economic analysis, voluntary exchange occurs in a free market because each party values what she receives more than what she gives up. See *id.*; RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 10-11 (4th ed. 1992). Such exchange increases "allocative efficiency," because it moves resources to "higher valued uses." FARNSWORTH, *supra*, at 762; see also POSNER, *supra*, at 11 (stating that "[w]hen resources are being used where their value is highest, we may say that they are being used efficiently"). By

ers who employ neoclassical economic analysis admit that this assumption ignores the complexities and contradictions of human behavior. Nevertheless, these analysts usually maintain that the simplifying assumptions of their models still allow for accurate evaluation and prediction.⁴

Always resourceful, legal scholars are turning enthusiastically to another social science that enriches the analysis of human decision making, called behavioral decision theory (BDT).⁵ This discipline seeks to explain and predict people's decisions and to account for their propensity when making decisions to depart from the predictions of the wealth-maximization principle.⁶

Although the turn to BDT will undoubtedly enrich and improve legal analysis, one purpose of this Essay is to urge caution and to identify some of the limits of the analysis as applied to law. In employing BDT, legal writers face the following dilemma: As a whole, BDT explains that human behavior is complex and contradictory. Taken this broadly, BDT is not likely to contribute very successfully to instrumental legal reform, which, of course, requires understanding the probable effect of law on human behavior. Alternatively, if legal theorists focus too narrowly on particular behavioral observations, their analysis will be no more realistic than predictions based on economic analysis's wealth-maximization precept. Can legal writers find the appropriate middle ground?

I evaluate the latter question by pursuing the second purpose of this Essay. I want to discuss a great paradox in contract law. Based on society's respect for individual freedom, its moral view that people should keep their promises, and its perspective that private exchange best allocates and distributes resources, freedom of contract enjoys a predominant role as a justificatory principle of contract law.⁷ Contract law allows parties to agree on contract terms as they choose and, in the absence of demonstrable market failures such as unequal bargaining power or concrete infirmities such as diminished capacity,

pursuing their own self-interest, people benefit society. See ADAM SMITH, *THE WEALTH OF NATIONS* 423 (Edwin Cannan ed., Modern Library 1937) (1791) (introducing the "invisible hand" that promotes the good of society); see also KRONMAN & POSNER, *supra* note 2, at 2 (noting that contractual exchange increases society's wealth). Scholars have also criticized neoclassical economic analysis of law for accepting existing wealth distribution as its starting point, assuming perfect information and the lack of monopolies, and ignoring transaction costs and third-party effects. See ROBERT A. HILLMAN, *THE RICHNESS OF CONTRACT LAW* 215-17 (1997) (noting criticisms).

⁴ See, e.g., POSNER, *supra* note 3, at 16-17.

⁵ See generally CASS R. SUNSTEIN, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175 (1997) (discussing behavioral research and its implications for law and policy). This discipline actually has a number of names. See *id.* at 1175 n.1.

⁶ See *id.* at 1175 ("Cognitive errors and motivational distortions may press behavior far from anticipated directions . . .").

⁷ See HILLMAN, *supra* note 3, at 9-12.

evaluates the validity of their choices largely based on their objective manifestation of assent.⁸ Courts operating within this conceptual framework rarely intercede in parties' agreements to test the adequacy of consideration.⁹

On the other hand, courts readily impinge on freedom of contract when assessing the validity of agreed (also called liquidated) damages clauses. Regardless of the quality of bargaining and the type of parties, if a court determines that an agreed damages provision is a "penalty," the court will refuse to enforce the provision.¹⁰ Why do judges single out liquidated damages provisions for special treatment? Can BDT help resolve this question?¹¹ Does the theory suggest the correct judicial approach to liquidated damages?

Part I of this Essay provides a brief overview of BDT. Part II presents the mystery of why courts single out liquidated damages for special treatment. Part III evaluates the extent to which the application of BDT sheds light on the judicial approach to liquidated damages. The Essay concludes that BDT contributes to the analysis of liquidated damages, but the theory comprises only part of the story. The more general lesson is that BDT is more successful at illustrating the limitations of a narrow conception of human behavior in legal analysis than at cultivating a positive or normative theory of the law.

I

BEHAVIORAL DECISION THEORY

BDT consists of the study of how people utilize information and create preferences.¹² The theory focuses on people's limited capacity to gather and process information, their use of "mental shortcuts" or heuristics to help them do so, and their biases in making decisions.¹³ The widespread presence of these phenomena in decision making ex-

⁸ See FARNSWORTH, *supra* note 3, at 116-19.

⁹ Exceptions to this general rule include unconscionable bargaining improprieties, severe information deficiencies, lack of capacity, and important impingements on public policy. See *id.*

¹⁰ See *infra* Part II.

¹¹ Professor Melvin Eisenberg has applied BDT to the issue of liquidated damages as part of a longer article illustrating the use of cognitive psychology in analyzing contract law. See Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 STAN. L. REV. 211, 225-36 (1995). Here, I focus solely on liquidated damages and expand the BDT discussion to include questions about its functions and limits when applied to legal issues.

¹² See Amos Tversky et al., *Contingent Weighting in Judgment and Choice*, 95 PSYCHOL. REV. 371, 371 (1988).

¹³ See Robert E. Scott, *Error and Rationality in Individual Decisionmaking: An Essay on the Relationship Between Cognitive Illusions and the Management of Choices*, 59 S. CAL. L. REV. 329, 333-34 n.10 (1986) ("Cognitive psychology . . . specifically examines internal processes, mental limitations, and the way in which the process of individual judgment is shaped by these limitations.").

plains why people often fail to make rational decisions,¹⁴ in the sense that their decisions fail to conform to the wealth-maximization goal.¹⁵ Although the list of decision-making techniques, heuristics, and biases that constitute BDT is long, in this short synopsis I will focus only on those that have a clear impact on the debate about liquidated damages.

A. Bounded Rationality

In order to make a decision, people must collect and process information. Each of these steps involves costs “in the form of time, energy, and perhaps money.”¹⁶ People rarely choose to invest in a complete search for information, although this decision may be perfectly rational in light of the costs and benefits involved.

The concept of bounded rationality involves people’s limited use of the information they have gathered to make decisions.¹⁷ The human capability to process information is bounded by “limitations of computational ability, ability to calculate consequences, ability to organize and utilize memory, and the like.”¹⁸ In light of the cost of information searches and bounded rationality, people tend to “economize to some degree on information”¹⁹ and, in the aggregate, make decisions that are “good enough”—the most appropriate decisions given the information available and the limitations of the decision maker²⁰—rather than “optimal” ones that would maximize their welfare.²¹

¹⁴ See *id.* at 335 (noting that “[t]here is mounting social science evidence that individuals make systematic errors in their cognitive judgments and decisions”); see also CHRISTINA LEE, *ALTERNATIVES TO COGNITION* 81 (1998) (asserting that “the approach to rationality taken by heuristics and biases literature” suggests that “human beings are not particularly good at thinking rationally”).

¹⁵ See Scott, *supra* note 13, at 330 (noting that people’s decisions stray from a “theoretical conception of ideal rationality”). For a brief discussion of the wealth maximization principle, see *supra* note 3.

¹⁶ Eisenberg, *supra* note 11, at 214.

¹⁷ See Larry T. Garvin, *Adequate Assurance of Performance: Of Risk, Duress, and Cognition*, 69 U. COLO. L. REV. 71, 141 (1998) (relying on 1 HERBERT A. SIMON, *MODELS OF BOUNDED RATIONALITY* (1982)).

¹⁸ Eisenberg, *supra* note 11, at 214.

¹⁹ Larry T. Garvin, *Disproportionality and the Law of Consequential Damages: Default Theory and Cognitive Reality*, 59 OHIO ST. L.J. 339, 391-94 (1998) (discussing bounded rationality).

²⁰ Garvin, *supra* note 17, at 142, n.327.

²¹ Eisenberg, *supra* note 11, at 214. Herbert Simon first called this phenomenon “satisficing.” See Garvin, *supra* note 17, at 141. Theorists debate whether decisions are “randomly wrong” and therefore, “over time, yield a balanced result” or whether “contracting part[ies consistently] err on one side when estimating risk or responding to information.” *Id.* at 142. If the latter is true, then wealth maximization will not reliably predict outcomes. See *id.*

B. Availability Heuristic

Because of people's limited willingness and capacity to process information,²² they simplify decision making by adopting heuristics. Heuristics consist of "mental shortcuts" for processing information²³ that "reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations."²⁴ Often helpful,²⁵ heuristics nevertheless cause systematic mistakes and create irrational biases.²⁶

Instead of attempting to determine from the pertinent facts the objective probability of an event's occurrence, for example, people simplify the processing of information by drawing on their memories and experiences.²⁷ This "availability" heuristic leads to error because people tend to remember more vividly recent dramatic events (even if rare) than "drab" ones (even if common).²⁸ They mistakenly believe that events that come to mind easily are more likely to occur than events that present a greater challenge to their imaginations.²⁹ For example, people tend to overestimate the possibility of contracting a particular disease if family members or friends suffer from it.³⁰

C. Framing and Endowment Effects

"Framing" involves the manner in which people describe and present choices.³¹ Choice description and presentation can affect how people evaluate data, thereby producing a "framing effect."³² For

²² See Eisenberg, *supra* note 11, at 216.

²³ See George Loewenstein et al., *Self-Serving Assessments of Fairness and Pretrial Bargaining*, 22 J. LEGAL STUD. 135, 140 (1993) (stating that heuristics are "cognitive rules of thumb that are naturally adapted to limited human information-processing capabilities").

²⁴ Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 3, 3 (Daniel Kahneman et al. eds., 1982).

²⁵ See *id.*

²⁶ See *id.* at 20.

²⁷ See Eisenberg, *supra* note 11, at 220-21; see also Garvin, *supra* note 17, at 146 (asserting that "vivid memories may color our recollections too garishly, distorting our perceptions and . . . our analyses"); Garvin, *supra* note 19, at 406 (noting that "people tend to overvalue their own experience in assessing risk").

²⁸ Garvin, *supra* note 19, at 399; see also Garvin, *supra* note 17, at 147 (asserting that "silence may breed overoptimism, as quietude, filtered through availability, yields too low an estimate of risk"); Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1477 (1998) (arguing that "the frequency of some event is estimated by judging how easy it is to recall other instances of this type").

²⁹ See Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683, 685, 706 (1999). "While underestimating dangers that are not highly publicized (heart disease, strokes, asthma), [people] grossly overestimate risks to which the media pay a great deal of attention (accidents, electrocution)." *Id.* at 707.

³⁰ See *id.* at 706.

³¹ Eisenberg, *supra* note 11, at 218-19.

³² Kuran & Sunstein, *supra* note 29, at 705.

example, people think of the status quo ante as a reference point when determining whether an event is a gain or a loss. Therefore, "losses are understood as such by reference to existing distributions and practices."³³ People can "manipulate the frame" so that a loss appears as a gain or vice versa, such as when a business offers a "cash discount" instead of a "credit card surcharge."³⁴ Professor Sunstein points out the significance of such manipulation: "'Alternative descriptions of the same choice problems lead to systematically different preferences . . . and the preference between x and y often depends on the choice set in which they are embedded.'"³⁵

The "endowment effect" is closely related to the framing effect.³⁶ According to the endowment effect, people value goods they own more than identical goods that belong to others.³⁷ For example, when people sell their property, they treat the sale as a loss "relative to their current endowments."³⁸ People therefore demand more to sell something they own than they would be willing to spend to purchase it:³⁹ "[P]eople who own hard-to-come-by sports tickets do not part with them, although they would be disinclined to pay the same amount to acquire them afresh."⁴⁰ The endowment effect therefore directly conflicts with the economic principle that a person's "maximum willingness to pay for a good should equal his minimum sale price."⁴¹

People also exhibit "loss aversion" behavior, which means they dislike losses more than they are "pleased with equivalent gains"⁴² and they will "sacrifice more to avoid losses than to obtain gains of a similar magnitude."⁴³ In addition, people disfavor out-of-pocket costs

³³ Sunstein, *supra* note 5, at 1180.

³⁴ *Id.*

³⁵ *Id.* at 1176 (quoting Amos Tversky, *Rational Theory and Constructive Choice*, in *THE RATIONAL FOUNDATIONS OF ECONOMIC BEHAVIOR* 185, 186 (Kenneth J. Arrow et al. eds., 1996)). "[F]raming effects very much influence judgments about whether a measure constitutes a subsidy or a penalty." *Id.* at 1181.

³⁶ *Id.* at 1185.

³⁷ See Jeffrey J. Rachlinski & Forest Jourden, *Remedies and the Psychology of Ownership*, 51 *VAND. L. REV.* 1541, 1551 (1998).

³⁸ David Millon, *Default Rules, Wealth Distribution, and Corporate Law Reform: Employment at Will Versus Job Security*, 146 *U. PA. L. REV.* 975, 1009 (1998).

³⁹ See *id.*; Rachlinski & Jourden, *supra* note 37, at 1551; see also Jennifer Arlen, *Comment: The Future of Behavioral Economic Analysis of Law*, 51 *VAND. L. REV.* 1765, 1771 (1998) (providing a concrete example of the endowment effect).

⁴⁰ Samuel Issaclaroff, *Can There Be a Behavioral Law and Economics?*, 51 *VAND. L. REV.* 1729, 1734 (1998).

⁴¹ Arlen, *supra* note 39, at 1771.

⁴² Sunstein, *supra* note 5, at 1179; see also Arlen, *supra* note 39, at 1771 (concluding that loss aversion "exists when the disutility associated with giving up an object is greater than the utility gained by acquiring it, even when there are no wealth effects").

⁴³ Rachlinski & Jourden, *supra* note 37, at 1556.

more than opportunity costs.⁴⁴ All of these phenomena tend to show that people generally prefer the status quo over change.⁴⁵

D. Hindsight Bias

Biases in decision making come in all shapes and sizes. Perhaps the most widely discussed and intuitively understood example is the "hindsight bias": People "overstate the predictability of past events."⁴⁶ Once they learn of an event, they believe it was more likely to occur than before they received the information.⁴⁷ People therefore "believe that others should have been able to anticipate events much better than was actually the case."⁴⁸ Although people understand their susceptibility to the "hindsight bias," as shown in common admonitions such as "hindsight vision is 20/20" and "don't be a Monday morning quarterback,"⁴⁹ they almost invariably fall into its clutches.⁵⁰

E. Overconfidence

People are generally too confident.⁵¹ They are willing to accept too much risk based on their belief that adverse low-probability risks will not occur.⁵² For example, people believe "they are less likely than others to be subject to automobile accidents, infection from AIDS, heart attacks, asthma, and many other health risks."⁵³ Once people make a decision, they are especially likely to downplay risks⁵⁴ and to become overconfident about their decisions.⁵⁵ Among other things,

⁴⁴ See Sunstein, *supra* note 5, at 1179.

⁴⁵ See Arlen, *supra* note 39, at 1772; Millon, *supra* note 38, at 1009.

⁴⁶ Jeffrey J. Rachlinski, *A Positive Psychological Theory of Judging in Hindsight*, 65 U. CHI. L. REV. 571, 571 (1998).

⁴⁷ See *id.* at 580 (arguing that "[f]inding out that an outcome has occurred increases its perceived likelihood" (quoting Baruch Fischhoff, *Hindsight≠Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty*, 1 J. EXPERIMENTAL PSYCHOL. 288, 297 (1975))).

⁴⁸ Baruch Fischhoff, *For Those Condemned to Study the Past: Reflections on Historical Judgment*, in NEW DIRECTIONS FOR METHODOLOGY OF SOCIAL AND BEHAVIORAL SCIENCE: FALLIBLE JUDGMENT IN BEHAVIORAL RESEARCH (R. Schweder & D. Fiske eds., 1980), quoted in Ward Edwards & Detlof von Winterfeldt, *Cognitive Illusions and Their Implications for the Law*, 59 S. CAL. L. REV. 225, 243 (1986).

⁴⁹ Rachlinski, *supra* note 46, at 571.

⁵⁰ For an excellent explanation of the possible causes of the hindsight bias, see *id.* at 582-86.

⁵¹ See Garvin, *supra* note 19, at 404.

⁵² See Garvin, *supra* note 17, at 151 (noting that people "assign too great a weight to relatively probable events and too low a weight to relatively improbable events"); Garvin, *supra* note 19, at 406; Sunstein, *supra* note 5, at 1178.

⁵³ Sunstein, *supra* note 5, at 1183; see also Christine Jolls, *Behavioral Economics Analysis of Redistributive Legal Rules*, 51 VAND. L. REV. 1653, 1659 (1998) (concluding that "people are often unrealistically optimistic about the probability that bad things will happen to them").

⁵⁴ See Garvin, *supra* note 17, at 148 n.362.

⁵⁵ See *id.* at 150.

this approach reduces the discomfort or "cognitive dissonance" that they feel about their decisions.⁵⁶ Similarly, people generally have an inflated view of their own capabilities and therefore downplay risks they believe they can control.⁵⁷

Notwithstanding evidence of overconfidence, people tend to overestimate the chance of "available" risks.⁵⁸ Available risks include recent events that have received lots of publicity⁵⁹ or affect them directly. As an example of the latter, recall that people tend to overestimate the likelihood of contracting a disease from which a family member or friend suffers.⁶⁰

F. Ambiguity Aversion

People prefer certainty over ambiguity and make choices to avoid uncertainty.⁶¹ They choose certain results over gambles, even when the latter are superior based on the law of probability.⁶² For example, people generally would prefer to receive a guaranteed gain of £3000 over "an eighty percent chance of gaining £4000."⁶³ When faced with unavoidable risk, people "prefer situations of risk (in which probabilities can be assigned to outcomes) over situations of uncertainty (in which probabilities cannot be assigned)."⁶⁴

G. Fairness Orientation

Social psychologists have shown that people seek to act fairly and to cooperate, and want others to perceive this behavior.⁶⁵ These tendencies may trump the pursuit of self-interest.⁶⁶ Relatedly, people prefer roughly equivalent exchanges, in terms of both quantity and

⁵⁶ See Garvin, *supra* note 19, at 400-03.

⁵⁷ See Arlen, *supra* note 39, at 1773.

⁵⁸ Jolls et al., *supra* note 28, at 1518.

⁵⁹ See Arlen, *supra* note 39, at 1781.

⁶⁰ See Kuran & Sunstein, *supra* note 29, at 706; *supra* notes 27-30 and accompanying text.

⁶¹ See Kuran & Sunstein, *supra* note 29, at 707; Sunstein, *supra* note 5, at 1191; see also Daniel Kahneman & Amos Tversky, *Choices, Values, and Frames*, 39 AM. PSYCHOLOGIST 341, 341 (1984) (stating that "[a] large majority of people prefer the sure thing over the gamble, although the gamble has higher (mathematical) expectation").

⁶² See Garvin, *supra* note 19, at 407.

⁶³ *Id.* The latter is worth £3200 based on the law of probability.

⁶⁴ Sunstein, *supra* note 5, at 1191; see also Garvin, *supra* note 19, at 365 n.141 (stating that "risk consists of future states in which the outcomes, though unknown, follow a known distribution, while uncertainty consists of those future states for which the distributions are also unknown").

⁶⁵ See Sunstein, *supra* note 5, at 1186; Thomas S. Ulen, *The Growing Pains of Behavioral Law and Economics*, 51 VAND. L. REV. 1747, 1755 (1998).

⁶⁶ See Sunstein, *supra* note 5, at 1186-87.

type.⁶⁷ Social psychologists deem this “rule of reciprocity” as “essential to the well being of society.”⁶⁸ The rule of reciprocity predicts that people will reject unfair bargains even when they would benefit from the exchange.⁶⁹ People are also averse to imposing penalties on others when they are not “deserved,”⁷⁰ and dislike windfalls for the same reason.⁷¹

II

THE MYSTERY OF LIQUIDATED DAMAGES

In theory, at the time of contracting, parties can agree on the amount of a promisor's damages liability in the event that the promisor breaks the contract.⁷² By including an agreed damages provision in the contract, contracting parties reduce the cost of contract breakdown by eliminating the expense of calculating damages⁷³ and by reducing the likelihood of litigation.⁷⁴ In addition, a liquidated damages clause ensures a promisee a recovery when the promisee cannot prove damages with sufficient certainty.⁷⁵ Moreover, liquidated damages impress on promisors the importance of performance and create incentives for the promisor to perform.⁷⁶ Concomit-

⁶⁷ See KENNETH J. GERGEN & MARY M. GERGEN, *SOCIAL PSYCHOLOGY* 288-92 (2d ed. 1986). “In an equitable exchange, each person's relative rewards and costs are equal. Inequity is uncomfortable, and people often try to restore equity.” *Id.* at 292.

⁶⁸ *Id.* at 288.

⁶⁹ See Arlen, *supra* note 39, at 1775.

⁷⁰ N.T. Feather, *Reactions to Penalties for an Offense in Relation to Authoritarianism, Values, Perceived Responsibility, Perceived Seriousness, and Deservingness*, 71 J. PERSONALITY & SOC. PSYCHOL. 572-73 (1996); see also Steven J. Stroessner & Larry B. Heuer, *Cognitive Bias in Procedural Justice: Formation and Implications of Illusory Correlations in Perceived Intergroup Fairness*, 71 J. PERSONALITY & SOC. PSYCHOL. 717 (1996).

⁷¹ See Ellen Berscheid & Elaine Walster, *When Does a Harm-Doer Compensate a Victim?*, 6 J. PERSONALITY & SOC. PSYCHOL. 435, 436 (1967) (contending that “people feel others should get exactly what they deserve, no more and no less”).

⁷² See, e.g., Scott M. Tyler, Note, *No (Easy) Way Out: “Liquidating” Stipulated Damages for Contractor Delay in Public Construction Contracts*, 44 DUKE L.J. 357, 357 (1994).

⁷³ See *Leeber v. Deltona Corp.*, 546 A.2d 452, 455 (Me. 1988); FARNSWORTH, *supra* note 3, at 841.

⁷⁴ See *Leeber*, 546 A.2d at 455; FARNSWORTH, *supra* note 3, at 841.

⁷⁵ See FARNSWORTH, *supra* note 3, at 841, 846 (mentioning the enforceability of agreed damages for breaking a covenant not to compete because damages are too uncertain); Charles J. Goetz & Robert E. Scott, *Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach*, 77 COLUM. L. REV. 554, 557 (1977).

⁷⁶ See Jeffrey B. Coopersmith, Comment, *Refocusing Liquidated Damages Law for Real Estate Contracts: Returning to the Historical Roots of the Penalty Doctrine*, 39 EMORY L.J. 267, 284 (1990) (asserting that liquidated damages provisions control risk); Matthew T. Furton, Note, *The Use of Penalty Clauses in Location Incentive Agreements*, 70 IND. L.J. 1009, 1018-19 (1995). But if the incentive is too obvious and compels performance when the promisor's best interest is to break the contract, a court may not enforce the provision because the court views the provision as a penalty. See, e.g., *Mason v. Fakhimi*, 865 P.2d 333, 335 (Nev.

antly, they signal to the promisee the promisor's willingness to perform.⁷⁷

In reality, courts often overturn liquidated damages clauses as "penalties," with greater zeal and vigor than they strike other contract terms.⁷⁸ Courts will deem a term a "penalty" if it calls for damages that bear no reasonable relation to the forecast of actual damages.⁷⁹ Courts also strike damages provisions as penalties if, at the time of contracting, it appeared that a court would have little difficulty ascertaining actual damages in the event of a breach.⁸⁰ Courts also police liquidated damages provisions based on actual outcomes. Unable to resist interceding when actual damages turn out to be disproportionate to an agreed remedies clause, many courts invalidate such clauses as penalties.⁸¹

The mystery is why courts are so willing to police agreed damages when they are so reticent to interfere with other contract provisions.⁸² Courts and commentators offer several explanations related to either the substance of agreed damages provisions, the bargaining process that produced them, or both. None of these explanations seems wholly satisfactory. For example, some analysts explain the modern judicial antipathy for agreed damages provisions as a holdover from the equity court's practice of refusing to enforce penal bonds,⁸³ in which a party promised to pay a certain sum if that party broke a contract.⁸⁴ The equity court believed that contract remedies were designed to compensate the injured party for the loss, not to punish

1993) ("[A] penalty is for the purpose of securing performance . . ." (quoting 22 AM. JUR. 2D *Damages* § 684 (1980))); FARNSWORTH, *supra* note 3, at 841.

⁷⁷ See Furton, *supra* note 76, at 1022.

⁷⁸ See Coopersmith, *supra* note 76, at 275 (presuming liquidated damages "to be a penalty" (citations omitted) (internal quotation marks omitted)). *But see* DJ Mfg. Corp. v. United States, 86 F.3d 1130, 1134 (Fed. Cir. 1996) (asserting that "federal law 'does not look with disfavor upon liquidated damages provisions in contracts'" (quoting Priebe & Sons, Inc. v. United States, 332 U.S. 407, 411 (1947))).

⁷⁹ See H.M.O. Sys., Inc. v. Choicecare Health Servs., Inc., 665 P.2d 635, 639 (Colo. Ct. App. 1983).

⁸⁰ See FARNSWORTH, *supra* note 3, at 844-45; Eisenberg, *supra* note 11, at 230-32.

⁸¹ See FARNSWORTH, *supra* note 3, at 845; Eisenberg, *supra* note 11, at 232.

⁸² See FARNSWORTH, *supra* note 3, at 841 (stating that "[c]ompared with the extensive power that contracting parties have to bargain over their substantive contract rights and duties, their power to bargain over their remedial rights is surprisingly limited").

⁸³ See A.W.B. SIMPSON, A HISTORY OF THE COMMON LAW OF CONTRACT 119-25 (1975); William H. Loyd, *Penalties and Forfeitures*, 29 HARV. L. REV. 117, 121-23 (1915); *see also* Goetz & Scott, *supra* note 75, at 593 (stating that "[s]ince the roots of the penalty rule were nourished on fairness concerns, it is not surprising that generations of lawyers have clung to the view that penalties are 'bad'").

⁸⁴ See FARNSWORTH, *supra* note 3, at 842. The modern approach to enforcement of agreed damages began around 1670. *See* SIMPSON, *supra* note 83, at 121.

or coerce the breaching party into performing, even when the parties had agreed to the penal bond precisely for those latter purposes.⁸⁵

Modern courts apparently have greeted with open arms the equity court's response to penal bonds. Indeed, courts now seem to have a curiously heightened sensitivity to *any* agreed damages provision, whether penal or not. Courts have also accepted the equity court's estimation of the coercive and punitive effect of penal bonds without seriously investigating the accuracy and validity of that position. Whether courts should consider an agreed remedy that is incommensurate with actual damages to be punitive and coercive, however, depends on the nature of the bargaining that produced the clause. After all, if the promisee paid a premium for an agreed damages provision that is greater than actual damages and the promisor understood the significance of agreeing to the term, "just compensation" arguably would entail enforcing the provision.⁸⁶ In fact, in the context of fair bargaining between business people, courts sometimes find palatable (and enforceable) provisions that amount to penalties, such as "take or pay" contracts in which purchasers of natural gas agree to pay regardless of whether they take the gas.⁸⁷

Modern courts therefore reinforce their antipathy to penalties by finding the bargaining process deficient.⁸⁸ For example, courts generalize that parties do not negotiate agreed remedies provisions.⁸⁹ Instead, courts believe that promisors share an "illusion[] of hope" that nothing will go wrong⁹⁰ and consequently fail to bargain adequately over remedial provisions. But even if this is an empirically accurate and otherwise persuasive explanation, why have courts singled out liquidated damages provisions for special treatment on this ground? For example, why do courts fail to police the parties' purported allocation of risk of unanticipated but calamitous circum-

⁸⁵ See FARNSWORTH, *supra* note 3, at 841 n.3 (citing *Jaquith v. Hudson*, 5 Mich. 123 (1858)); see also Goetz & Scott, *supra* note 75, at 561 (stating that parties should not be able to recover more than "just compensation," even if bargained for).

⁸⁶ Although courts pay lip service to freedom of contract between equal partners, the liquidated damages test always has included a limitation based on "just compensation": "There is no sound reason why persons competent and free to contract may not agree upon this subject as fully as upon any other, or why their agreement, when fairly and understandingly entered into with a view to *just compensation for the anticipated loss*, should not be enforced." *Wise v. United States*, 249 U.S. 361, 365 (1919) (emphasis added).

⁸⁷ FARNSWORTH, *supra* note 3, at 848.

⁸⁸ See, e.g., *Monsen Eng'g Co. v. Tami-Githens, Inc.*, 530 A.2d 313, 317 (N.J. Super. Ct. App. Div. 1987).

⁸⁹ Courts fail to assume that "parties have capitalized the risk of breach and included this value in the price." Phillip R. Kaplan, Note, *A Critique of the Penalty Limitation on Liquidated Damages*, 50 S. CAL. L. REV. 1055, 1072 (1977).

⁹⁰ Coopersmith, *supra* note 76, at 268 & n.6 (quoting C. McCORMICK, DAMAGES § 147, at 601 (1935)).

stances with the same vigor to determine whether the parties were too optimistic that nothing would go wrong?

In addition, courts apparently believe that promisors are peculiarly susceptible to being coerced into agreeing to penalty provisions.⁹¹ Little evidence from actual cases supports this assertion⁹² and nothing about the nature of agreed remedies explains why promisees would have more leverage with respect to these clauses than any other clause.⁹³

Another alleged deficiency in the bargaining process with respect to agreed remedies is "the limits of cognition" of contracting parties in this context.⁹⁴ Professor Eisenberg asserts that although parties can easily understand terms "such as subject matter, quantity, and price," they cannot comprehend "the scenarios of breach" and the "application of a liquidated damages provision" to these scenarios.⁹⁵ In addition, parties discount the probability of breach based on a cost-benefit analysis tainted by optimism about performance.⁹⁶ For these reasons, parties may fail to focus on liquidated damages provisions when agreeing to a contract, thereby supplying courts with a justification for scrutinizing these provisions more closely.

As with the other explanations for the policing of liquidated damages, the "limits of cognition" approach depends on the speculative assertion that parties' planning and bargaining of liquidated damages provisions are less effective than their planning and bargaining of other provisions. Professor Eisenberg's "limits of cognition" explanation, along with other explanations that take into account aspects of cognition, more generally raise the issue of BDT's appropriate role in explaining and improving law. We now turn to this subject. Does the

⁹¹ See Eisenberg, *supra* note 11, at 226-27.

⁹² See *id.* at 225-26; Goetz & Scott, *supra* note 75, at 592; see also *DJ Mfg. Corp. v. United States*, 86 F.3d 1130, 1133 (Fed. Cir. 1996) (asserting that parties should be free to agree to liquidated damages clauses as with any other contract term).

⁹³ Some theorists explain and support courts' enthusiastic policing of liquidated damages provisions on the basis of economic efficiency. But whether the efficient strategy would allow penalty provisions or strike them is subject to debate. See, e.g., FARNSWORTH, *supra* note 3, at 938 n.14 (citing the opposing views of Goetz and Scott, and Clarkson, Miller, and Muris). Based on the goal of maximizing wealth and taking into account the theory of efficient breach, a legal economist would ask whether the net gain from a regime that enforces penalties (which would typically require the promisor to incur the cost of obtaining a release from the promisee before substituting a third party for greater profits) exceeds the net gain from an approach that strikes penalties (which would allow the promisor to breach the contract with the promisee in order to substitute a third party for greater profits, but which would typically entail the cost of litigation to compensate the promisee). See generally William S. Dodge, *The Case for Punitive Damages in Contracts*, 48 DUKE L.J. 629, 633 (1999) (arguing that "punitive damages should be available for all willful breaches of contract").

⁹⁴ Eisenberg, *supra* note 11, at 227.

⁹⁵ *Id.*

⁹⁶ See *id.* at 227-28.

theory really shed light on the mystery of liquidated damages? Does BDT suggest appropriate reform?

III

BEHAVIORAL DECISION THEORY AND CONTRACT LAW

By identifying and reporting many cognitive biases, heuristics, and limitations,⁹⁷ BDT suggests that human behavior is complex and contradictory⁹⁸ and that the wealth-maximization baseline of economic analysis is too facile. Do cognitive theories tell us anything else that can be helpful to legal analysis? Can the theories help suggest new legal rules? In seeking to answer these questions, this Part investigates and evaluates BDT's contribution to the problem of liquidated damages.

A. Behavioral Decision Theory's Relevance to Contract Law Issues

Although controversial, for purposes of discussion, I will assume the accuracy and reliability of the laboratory studies that find deficiencies in the manner that people process information and reach decisions.⁹⁹ Assuming that people generally act in conformity with the

⁹⁷ See LEE, *supra* note 14, at 5 (noting that "a bewildering array of mutually contradictory models of human choices and human behavior exists, and a large literature is dedicated to the comparison, revision, integration, and disintegration of these models across an enormous range of behavioral domains").

⁹⁸ See *id.* at 79 (stating that "[h]uman behavior is no more and no less than a complex physical system").

⁹⁹ For a discussion of the possible shortcomings of these studies, see Russell Korobkin, *The Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608, 661 (1998), and authorities cited therein. See also LEE, *supra* note 14, at 57 (concluding that "[i]t is clear that models of human behavior based on the completion of questionnaires are less than ideal"); *id.* at 122 (asserting that psychologists should understand the "political assumptions that underlie their work"); Edwards & von Winterfeldt, *supra* note 48, at 270 (discussing studies "done under conditions of low motivation and attention and without the use of tools").

A more broadside criticism of cognitive theory is based on its focus on *individual* decision theory: "[C]ollectively [cognitive] findings . . . say nothing about the social dimensions of information acquisition, retrieval, processing, and transmission, and they disregard the social mechanisms that shape risk judgments and preferences." Kuran & Sunstein, *supra* note 29, at 710. Christina Lee argues that "[m]odern psychology's focus on individual cognition, its much heralded 'cognitive revolution,' reifies cognition and artificially separates it from the person, and the person from the broader physical and social context." LEE, *supra* note 14, at vii. For example, "[t]he assumption that cognition is always prior to emotion is open to empirical challenge." *Id.* at 57; see also *id.* at 95 (pointing out arguments in favor of "contextualist theories"). According to critics, cognitive psychology ignores the interaction between emotion and cognition, the role of subconscious cognition, and ramifications of culture on cognition. See *id.* at 81, 99-101. Critics lament scholars' focus on cognition at the expense of a broader contextual analysis as the logical culmination of an unsuccessful effort to present psychology as a coherent science. See *id.* at 2 (arguing that "psychology's contemporary emphasis on the cognitive has inhibited the development of alternative approaches to our subject matter"). In the alternative,

predictions of behavioral experiments, what conclusions should legal analysts draw?¹⁰⁰ What hurdles exist for both the descriptive and prescriptive use of BDT in contract law?

Legal analysts must clarify the extent to which particular cognitive processes actually occur in the *exchange* setting. For example, analysts debate whether contract default rules, such as the award of expectancy damages, enjoy an endowment effect.¹⁰¹ Perhaps parties at the bargaining stage view expectancy damages as an entitlement and therefore value that remedy more than other remedial alternatives such as liquidated damages.¹⁰² On the other hand, neither party really “owns” the right to expectancy damages until the parties enter a contract and one party breaches. As a result, the endowment effect may not apply.¹⁰³

Before legal analysts rely on behavioral studies, they also need to obtain or develop data based on simulations of decision making in the full range of contractual transactions. For example, the parties may absorb and process information about the importance of a liquidated damages provision very differently, depending upon whether they are experienced business people, business novices, or individuals making a formal or informal agreement. The parties’ perceptions of liquidated damages may be very different, for example, depending on whether they recently experienced a contract breakdown and judicial enforcement (or rejection) of such a provision. Whether the parties have an interest in a long-term relationship as opposed to a one-shot deal also probably influences their perceptions of agreed damages. For example, parties who have invested in long-term relations may discount information that would make them feel insecure.¹⁰⁴ No single description of cognitive processes can either fully explain the legal approach to agreed damages or prescribe the law that should apply to all exchange transactions.¹⁰⁵

“[c]ontextualist behavioralism . . . increases the focus on the role of environmental stimuli in evoking behavior.” *Id.* at 117.

¹⁰⁰ For a discussion in one context, see Korobkin, *supra* note 99, at 631.

¹⁰¹ See *id.*; Millon, *supra* note 38, at 1010-17.

¹⁰² See generally Korobkin, *supra* note 99, at 612 (stating that “contracting parties view default terms as part of the status quo, and they prefer the status quo to alternative states”).

¹⁰³ Compare Millon, *supra* note 38, at 1010 (asserting that “contractual default rules themselves do not create entitlements”), with Korobkin, *supra* note 99, at 631 (“The highly contingent nature of contract default rules means that such rules do not provide actual endowments, but only what might be termed ‘illusory endowments.’” (citations omitted)).

¹⁰⁴ See Garvin, *supra* note 19, at 401-02.

¹⁰⁵ In his companion paper, Professor Rachlinski asserts that “attention to context has always been an important part of BDT.” Jeffrey J. Rachlinski, *The “New” Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters*, 85 CORNELL L. REV. 739, 744 (2000). But he supports current law’s curious (and mandatory) approach to liquidated damages based on the broad generalization that contracting parties are overoptimistic. See *id.* at 760-63.

Not only can disparate contexts lead to different cognitions, but each party to a particular transaction may have different motivations, experiences, practices, and goals.¹⁰⁶ Certainly, each party's outlook can influence the way that party receives and processes information. For example, different levels of experience may lead to conflicting views of the likelihood of contract default and of the probability that a court will enforce an agreed damages provision. If one party has enjoyed great success in avoiding contract breakdowns and is therefore too optimistic about the outcome of the current transaction, but the other party, fresh from a broken deal, overestimates the possibility of default, it is not self-evident which party the law of agreed damages should favor.

B. The Problem of Conflicting Lessons

Even if behavioral phenomena generally occur in contractual settings—for example, contracting parties are too optimistic or prefer the status quo—do such observations explain the content of legal rules or suggest improvements in the law? BDT may be of only limited help because its theorists have not yet developed guiding principles from the plethora of observations about behavior.¹⁰⁷

Consider liquidated damages. Because people accumulate, understand, and process only a limited amount of information about the future, contracting parties may fail to comprehend and focus on the prospect of breach.¹⁰⁸ Because people are too optimistic, even contracting parties with perfect information about breach may still assume the success of their venture and sacrifice the detailed bargaining necessary to achieve an effective liquidated damages provision.¹⁰⁹ Because people dislike uncertainty and “suppress information that would yield inconsistency,”¹¹⁰ contracting parties endeavoring to create and perform an agreement may assume the ultimate success of the project and discount inconsistent information about the prospect of

¹⁰⁶ See Garvin, *supra* note 19, at 389. See generally Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1422, 1424-26 (1999) (discussing how the dominant party in a transaction can manipulate the other party's cognition and decisions).

¹⁰⁷ See Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353, 380 (1988) (stating that “[p]sychologists . . . have . . . a large set of observations about how experimental subjects behave”); see also LEE, *supra* note 14, at 16 (arguing that “[cognitive] models are useless in understanding or predicting behavior, although they may be seductive ways of talking about that behavior afterwards”); Hanson & Kysar, *supra* note 106, at 1427 (arguing that “behavioral research presents too many conflicting and overlapping biases to make confident overall predictions about consumer perceptions”).

¹⁰⁸ See Eisenberg, *supra* note 11, at 227.

¹⁰⁹ See *supra* notes 51-60 and accompanying text.

¹¹⁰ Garvin, *supra* note 17, at 148 n.362.

default. Because people desire fair exchanges and dislike windfalls and penalties, contracting parties may disfavor coercive and punitive agreed damages provisions when they do focus on them.

These cognitive phenomena and the predictions they generate about contracting parties' decision making both help to explain the judicial response to liquidated damages provisions and tend to confirm the appropriateness of the current aggressive judicial approach to the issue. The parties view contract breakdown as a remote possibility, fail to focus on it, and, to the extent that they do think about breach, seek a fair remedial package. Because of the lack of paradigmatic bargaining with respect to liquidated damages provisions and because of their potential, due to unanticipated circumstances, to generate penalties and windfalls contrary to the parties' intentions, courts do and should enthusiastically police liquidated damages provisions.

On the other hand, analysts have a sufficient arsenal of behavioral phenomena to mount a convincing campaign in favor of enforcing agreed damages provisions whether or not they satisfy current tests. For example, assuming that people assess default rules as entitlements, contracting parties should prefer the default remedial position—the award of expectancy damages. When parties contract around this default rule and agree to liquidate damages, the term must be very important to them. The parties' effort to replace the default rule suggests that they likely bargained over the provision with care.¹¹¹

Contracting parties should focus their bargaining on a liquidated damages provision for other behavioral reasons as well. Because people do not like ambiguity,¹¹² contracting parties may prefer the "safety" of a liquidated damages provision over the uncertainty of expectancy damages.¹¹³ Judges who exhibit a hindsight bias, however, will overestimate the parties' ability to calculate, at the time of contracting, the actual damages that would result from a breach. Because judges will believe that the parties' remedial situation at the time of contracting was not ambiguous, judges will undervalue the importance the parties attach to their agreed damages provision. This suggests that courts should presume the enforceability of such provisions rather than make every effort to strike them.

¹¹¹ Cf. Korobkin, *supra* note 99, at 673 (asserting that tailored default rules avoid status quo bias).

¹¹² See *supra* notes 61-64 and accompanying text.

¹¹³ Cf. Sunstein, *supra* note 5, at 1191 (arguing that "[if] people are averse to ambiguities, they may produce an incoherent pattern of regulation . . . that some things are 'safe' and others are 'dangerous'").

The parties' focus on achieving a "fair" exchange and their aversion to windfalls and penalties also may point to enforcement of agreed remedies. These attitudes may attenuate the parties' tendency to discount the importance of remedial provisions and may motivate them to uncover potential unintended consequences of their remedial approach and to account for them in the contract.

Finally, parties can "frame" their agreed damages provision so that a court is unlikely to call it a penalty. For example, a seller of goods can offer a discount for early payment instead of a penalty for late payment, even though the two strategies achieve the same result.¹¹⁴ The ease with which parties can manipulate their agreed remedies provision suggests that the dichotomy between penalties and liquidated damages lacks substance, and simply results from a framing bias of judges.

C. Behavioral Decision Theory's Ambiguous Normative Position

Even if BDT coherently applies to contract law, the appropriate strategy for lawmakers still remains elusive. Lawmakers must consider whether and how to accommodate cognitive shortcomings. For example, should the law excuse parties' failure to process information or attempt to change their behavior? Have judges intuited behavioral shortcomings, even without the benefit of a formalized analysis, so that the law already appropriately accommodates biases? How do legal positions based on people's cognitive limitations affect other legal policy goals?

Basing the content of law on BDT may be particularly challenging to lawmakers. For example, if both parties irrationally discount the probability of breakdown and therefore pay less attention to their liquidated damages clause at the bargaining stage, it is not self-evident that the clause should be thrown out. Notwithstanding their lack of care, the parties still expressed a preference for liquidated damages over default expectancy damages and may have made explicit or implicit trade-offs based on that decision. Generally, overturning contract terms based on the degree of attention the parties paid to them seems too blunderbuss an approach to contract enforcement. Parties should be able to rely on their contract terms, absent deception or other concrete bargaining infirmities, regardless of the amount of time they devoted to crafting any particular term.

An even more important question legal analysts face is whether law based on cognitive limitations will create appropriate incentives. Law that rarely excuses contracting parties from their objective mani-

¹¹⁴ See *Banta v. Stamford Motor Co.*, 92 A. 665, 667 (Conn. 1914); see also *supra* text accompanying note 87 (discussing courts' willingness to enforce take-or-pay contracts).

festations of assent holds them to a higher standard than BDT might suggest. Nevertheless, objective-assent law creates incentives for parties to maximize their planning and drafting strategies and abilities.¹¹⁵ Moreover, training and experience improve cognitive abilities over time.¹¹⁶ Thus, if courts routinely enforce agreed damages clauses, parties might become more aware of the seriousness, purpose, and effect of these provisions.¹¹⁷ In other words, the appropriate strategy for dealing with perception problems is not self-evident: Robust law that encourages communication and planning by holding the parties to their contract ultimately may be more effective than law that liberally absolves promisors from their obligations.

Because many of the cognitive deficiencies that relate to contract making are easy to intuit,¹¹⁸ it should not be surprising that current law to some degree already reflects the realities of how people make choices.¹¹⁹ Judicial criticism of parties' "illusions of hope" that nothing will go wrong in agreed damages cases underscores the existing judicial focus on cognitive processes.¹²⁰ The challenge for lawmakers, however, is to determine whether the law already has encompassed all that BDT has to offer or whether cognitive theory mandates further

¹¹⁵ This assumes, of course, that lack of care in producing an agreed damages clause is not "hard-wired into us." Ulen, *supra* note 65, at 1760; cf. Edwards & von Winterfeldt, *supra* note 48, at 271 (suggesting that when lawyers and clients educate each other, they mutually improve cognition).

¹¹⁶ See Edwards & von Winterfeldt, *supra* note 48, at 259; see also ROGER BROWN, *SOCIAL PSYCHOLOGY* 699 (1965) (finding that "caution increases with age"); Edwards & von Winterfeldt, *supra* note 48, at 270 (concluding that "aids to careful thought severely limit the productivity of the error producing mechanisms"); Roberta Romano, *A Comment on Information Overload, Cognitive Illusions, and Their Implications for Public Policy*, 59 S. CAL. L. REV. 313, 313 (1986) (remarking that "cognitive processes are, in fundamental ways, learned intellectual skills").

¹¹⁷ Attention to incentives in the behavioral calculus is itself fraught with danger. For example, disclosure law may backfire if its goal is to increase cognition; people may become overloaded with information and make even worse decisions. *But see* David M. Grether et al., *The Irrelevance of Information Overload: An Analysis of Search and Disclosure*, 59 S. CAL. L. REV. 277, 278-79 (1986) (arguing that disclosure laws do not create "information overload" problems).

¹¹⁸ See Edwards & von Winterfeldt, *supra* note 48, at 273.

¹¹⁹ For example, Professor Fuller long ago noted the cautionary function of the consideration requirement in contract law. Contract law requires "bargained for consideration" to assure that promisors are sufficiently cautioned about the seriousness and ramifications of their promise. Contract law therefore already provides a check on parties' optimism. See Lon L. Fuller, *Consideration and Form*, 41 COLUM. L. REV. 799, 799-802, 806-07, 812-15 (1941). To cite another example, contract lawmakers have already softened the duty-to-read requirement in the context of consumer form contracts because of an appreciation for the limited cognition of consumers in the face of an "information overload" and other cognitive hurdles. Grether et al., *supra* note 117, at 277-79; see also *C & J Fertilizer Inc. v. Allied Mut. Ins. Co.*, 227 N.W.2d 169, 176-77 (Iowa 1973) (stating that insured's reasonable expectations rather than literal contract language govern enforcement of adhesion contract).

¹²⁰ See *supra* note 90 and accompanying text.

reform. Focusing again on agreed damages, does existing law overprotect, underprotect, or adequately protect parties from their excessive optimism? The answer to this question is not obvious.

Lawmakers should also consider the impact of rules fashioned to deal with cognitive limitations on other goals and policies. For example, courts could create monumental floodgate problems by acknowledging that they police liquidated damages provisions to account for parties' general irrationality in processing information.¹²¹ After all, why should judges single out liquidated damages for this treatment? What contract term would be safe from this attack? Aggressive use of this reasoning to question contract enforceability could therefore undermine contract law's goals of certainty and predictability, which may be better served by the traditional objective theory of assent.¹²²

D. The Problem of the Decision Maker: Judges' Cognitive Processes

It should be clear by now that the decision-making techniques, heuristics, and biases that cognitive theory explains apply to decision makers in the legal system.¹²³ How should lawmakers struggling with liquidated damages take their own cognitive shortcomings into account, if at all? Because agreed damages law is largely judge-made, I will focus on judicial cognitive limitations.

First, we have already seen that judges who exhibit a hindsight bias may overestimate the parties' capacity at the bargaining stage to calculate the potential damages from a breach.¹²⁴ As a result, judges may ignore the parties' ambiguity aversion and generally undervalue the importance of the agreed damages provision to the parties.¹²⁵ This result suggests that judges should err on the side of overenforce-

¹²¹ See Sunstein, *supra* note 5, at 1178 (stating that "if people's choices are based on incorrect judgments, at the time of choice, about what their experience will be *after the choice*, there is reason to question whether respect for choices rooted in these incorrect judgments is a good way to promote utility or welfare").

¹²² See MICHAEL J. TREBILCOCK, *THE LIMITS OF FREEDOM OF CONTRACT* 163 (1993). Trebilcock argues that "the case for paternalistic legal interventions on grounds of contingent, adaptive, or bad preferences becomes much more problematic and the burden of justifying intervention correspondingly much stronger, simply because clearly definable individual preferences are being repudiated in the absence of readily identifiable forms of coercion or information failure." *Id.*; see also *id.* at 157 ("If the ideas of endogenous preferences and cognitive distortions are carried sufficiently far, it may be impossible to describe a truly autonomous preference. . . . If the notion of autonomy is abandoned, the realm of permissible legal interferences may become limitless. . . ." (quoting Cass R. Sunstein, *Legal Interferences with Private Preferences*, 52 U. CHI. L. REV. 1129, 1170 (1986))).

¹²³ See Jolls et al., *supra* note 28, at 1543 (citing W. KIP VISCUSI, *FATAL TRADEOFFS* 149 (1992)); Kuran & Sunstein, *supra* note 29, at 765 (suggesting that "[j]udges are subject to the availability heuristic, vulnerable to informational biases, and responsive to reputational incentives").

¹²⁴ See *supra* notes 112-14 and accompanying text.

¹²⁵ See *id.*

ment of agreed remedies provisions to compensate for their hindsight bias. Second, we have seen that parties can manipulate the penalty-liquidated damages distinction based on the manner in which they frame their agreed damages provision. This suggests that the law should dispense with this misleading distinction. Third, judges' fairness orientation may cause them to overturn an agreed damages provision solely because actual damages turn out to be inconsistent with the agreed damages calculus. In doing so, courts circumvent the parties' very purpose in crafting the provision, notwithstanding the quality of the parties' bargaining. Agreed remedies perhaps should enjoy a presumption of enforceability to account for this propensity of judges as well.

Judicial reformers of agreed damages law nonetheless will have to proceed with caution. Cognitive limitations will also affect the very judicial decision whether or not to abandon the current aggressive policing approach to agreed damages. Judicial reformers may be overconfident that judges like themselves will not succumb to the hindsight bias or the framing effect. Consequently, reformers may resist accounting for these phenomena in their policy decisions and therefore remain too content with current law.¹²⁶ Moreover, judicial reformers may resist revising the law of agreed damages because they remember outrageous penalty clauses better than run-of-the-mill agreed damages provisions and therefore mistakenly believe the former occur more frequently than the latter.¹²⁷ On the other hand, judicial reformers reviewing previous cases with the benefit of hindsight may overestimate judges' and juries' ability to distinguish between fair and opportunistic bargaining of agreed damages clauses and therefore underestimate the importance of the current tests of agreed damages.

Perhaps of most concern, attempting to account for judges' cognitive biases in prescribing the law of agreed damages may undermine the judicial process. No decision, whether it involves agreed damages, other contract law issues, or even general legal issues, would be safe from the scrutiny of behavioralists. However, in its present inchoate form, BDT may offer up too many different observations to allow for a systematic account of cognitive psychology in judicial decision making. At least for the foreseeable future, therefore, perhaps the parties themselves should be accountable for their own remedial provisions.¹²⁸

¹²⁶ See Arlen, *supra* note 39, at 1785.

¹²⁷ See Kuran & Sunstein, *supra* note 29, at 765 (noting that "[j]udges are subject to the availability heuristic"). In addition, judges simply may prefer the status quo.

¹²⁸ See *infra* notes 131-32 and accompanying text. The parties' freedom to draft agreed remedies provisions would of course be subject to traditional policing doctrines such as good faith and unconscionability. See *id.*

IV CONCLUSION

I asked two questions in the introduction, one positive and the other normative. First, does BDT help explain the special judicial treatment of agreed damages provisions? Second, does the theory suggest the correct judicial approach to agreed damages?

BDT does shed some light on the mystery of agreed damages.¹²⁹ Judges exuberantly police agreed damages in part because of their perception of the planning parties' cognitive limitations. Judges believe that parties at the bargaining stage are generally too optimistic that nothing will go wrong and therefore devote their limited bargaining energies and abilities to other issues. People's aversion to penalties and windfalls also undoubtedly enhances the judicial appetite for devouring agreed damages clauses.¹³⁰ Moreover, judges probably fail to account for their own cognitive biases, such as their tendency to remember outrageous agreed damages clauses and to believe too optimistically that they are not susceptible to the hindsight bias or the framing effect.

Prescriptively, BDT demonstrates that many reasons for "strict scrutiny" of agreed damages clauses may be only half right. Other cognitive heuristics and biases suggest that, on the whole, parties may especially value their agreed damages provision, spend lots of time refining it, account for it when assigning other rights and duties in the contract (such as price), and generally believe it is fair. In light of conflicting evidence on the nature of the parties' bargaining and given contract law's apparent focus on only part of the story, BDT helps show the absence of a persuasive justification for special judicial treatment of agreed damages clauses. In addition, BDT substantiates this position by underscoring judicial decision-making foibles in this realm. BDT's focus on the bargaining process also emphasizes the value of rules that presume the enforceability of agreed damages clauses in order to encourage parties to improve their decision making by reading and studying their agreed damages provisions.

¹²⁹ Professor Sunstein argues that BDT is useful in refining the economic analysis of the law:

[I]t does not follow that people's behavior is unpredictable, systematically irrational, random, rule-free, or elusive to social scientists. On the contrary, the qualifications can be described, used, and sometimes even modeled. Those qualifications, and the resulting understandings of decision and choice, are playing a large and mounting role in many fields within economics and other social sciences.

Sunstein, *supra* note 5, at 1175-76.

¹³⁰ See Justin Sweet, *Liquidated Damages in California*, 60 CAL. L. REV. 84, 89 (1972) (discussing courts' employment of "nonenforcement as an equitable compromise").

In light of these considerations and because of the contributions of agreed damages provisions,¹³¹ perhaps courts should abandon the special tests for agreed damages and simply apply traditional policing doctrines, such as unconscionability and duress. Courts employing this approach would strike an agreed damages provision only if they found it "oppressive" or the product of "unfair surprise."¹³² In short, agreed damages provisions probably should be treated like any other contract term.

Despite BDT's obvious contribution to legal analysis, this Essay suggests that BDT cannot *resolve* the mystery of liquidated damages. Questions remain concerning whether specific cognitive processes apply in the exchange setting as well as whether, and to what extent, they apply to both parties. Moreover, reformers relying on BDT will remain on slippery footing precisely because particular cognitive phenomena point to different explanations for and policy approaches to the agreed damages problem. Even if coherent, BDT's role in establishing the appropriate content of law will continue to challenge reformers, who must determine how to deal with their own cognitive limitations. For these reasons, until BDT develops a more coherent approach to decision making, courts and analysts should proceed with caution in applying it.

¹³¹ See *supra* notes 72-77 and accompanying text.

¹³² See, e.g., U.C.C. § 2-302 cmt. 1 (1989).