

Legal Bargaining Theory's New "Prospecting" Agenda: It May Be Social Science, But Is It News?

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Once upon a time, "scholarship" about legal bargaining consisted of negotiator war stories colorfully and exuberantly told. Social-scientific study of the subject, at least in law schools, did not begin in earnest until the nineteen-seventies. The literature of storytelling and anecdote has not disappeared but it has gone into a pronounced eclipse, so that often the social-scientific study of legal bargaining is the only scholarly game in town. In this article I question the wisdom of this shift, almost seismic in its proportions, and suggest that it is too soon to jump on the social science bandwagon. I limit discussion to the uses made of the Prospect Theory of Daniel Kahneman and Amos Tversky and the Theory's central concept of "anchoring and adjustment." Anchoring is perhaps the most thoroughly analyzed and empirically documented of all the Prospect Theory concepts and any difficulties encountered in incorporating the concept into legal bargaining theory will recur many times over in working with other parts of the Prospect Theory framework.

I. Introduction

Once upon a time most writing about bargaining was anecdotal, consisting of negotiator war stories colorfully and exuberantly told. Expert (or at least experienced) bargainers principally from the fields of business,¹ international relations,² and law,³ regaled readers with descriptions of maneuvers that had helped gain the upper hand in negotiations with adversaries, joint venturers, and colleagues, sometimes famously.⁴ Some of this writing was intelligent, insightful and sophisticated and some of it was fanciful, jumbled, and silly, but all of it was spirited and interesting. In a parallel universe, at almost the same time, social psychologists,⁵ sociologists,⁶ economists,⁷

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¹ E.g., HERB COHEN, *YOU CAN NEGOTIATE ANYTHING* (1980); CHESTER L. KARRASS, *THE NEGOTIATING GAME* (1970).

² E.g., ARTHUR LALL, *MODERN INTERNATIONAL NEGOTIATION: PRINCIPLES AND PRACTICE* (1966).

³ E.g., JOHN ILICH, *THE ART AND SKILL OF SUCCESSFUL NEGOTIATION* (1973); GERARD I. NIERENBERG, *FUNDAMENTALS OF NEGOTIATING* (1973); Michael Meltsner & Philip G. Schrag, *Negotiating Tactics for Legal Services Lawyers*, 7 *CLEARINGHOUSE REV.* 259 (1973). For a more recent example of the genre, see JAMES C. FREUND, *SMART NEGOTIATING: HOW TO MAKE GOOD DEALS IN THE REAL WORLD* (1993).

⁴ E.g., DEAN ACHESON, *PRESENT AT THE CREATION: MY YEARS IN THE STATE DEPARTMENT* 81-86, 276-84, 529-38 (1969) (describing the negotiation of the 1944 Bretton Woods agreement with Russia, the North Atlantic Treaty Organization, and the Korean Armistice, respectively).

⁵ E.g., DANIEL DRUCKMAN, *NEGOTIATIONS: SOCIAL-PSYCHOLOGICAL PERSPECTIVES* (1977); DEAN G. PRUITT, *NEGOTIATION BEHAVIOR* (1981); JEFFREY Z. RUBIN & BERT R. BROWN, *THE SOCIAL PSYCHOLOGY*

mathematicians,⁸ political scientists,⁹ and others¹⁰ also began to write about bargaining in a more systematic and methodical manner.¹¹ In thought experiments, puzzles, games, laboratory simulations, and surveys, some quite cleverly designed, these scholars measured the impact on outcome of a wide array of factors – personal, structural and substantive – that define bargaining practice, and identified and described the moves and maneuvers that help one bargain effectively.

In legal bargaining scholarship in particular, there was a clear divide between these two types of work, with neither drawing on nor often even acknowledging the existence of the other.¹² Over time, however, the two began to cross-pollinate, and ultimately to converge, first in the teaching materials and scholarly writing of the clinical law movement,¹³ and eventually in legal scholarship generally. The best early example of this convergence is the intellectually sophisticated but difficult set of materials on the lawyering process constructed by Gary Bellow and Bea Moulton in the early 1970s.¹⁴ Drawing breathlessly on several diverse and complicated bodies of scholarship, Bellow and Moulton mixed social science findings about bargaining with expert practitioner insights to produce what might best be described as a legal version of a nineteenth century medical textbook; a serendipitous combination of literature and science fused together, tapestry-like, in annotated stories, case studies and original notes. The book is still the high water mark in what might be thought of as the “public intellectual”¹⁵ approach to the study of legal bargaining.

OF BARGAINING AND NEGOTIATION (1975); RICHARD E. WALTON & ROBERT B. MCKERSIE, *A BEHAVIORAL THEORY OF LABOR NEGOTIATIONS* (1965).

⁶ E.g., SAMUEL B. BACHARACH & EDWARD J. LAWLER, *BARGAINING: POWER, TACTICS, AND OUTCOMES* (1981); OTOMAR J. BARTOS, *PROCESS AND OUTCOME OF NEGOTIATIONS* (1974).

⁷ THOMAS C. SCHELLING, *THE STRATEGY OF CONFLICT* (1960).

⁸ HOWARD RAIFFA, *THE ART AND SCIENCE OF NEGOTIATION* (1982).

⁹ *BARGAINING: FORMAL THEORIES OF NEGOTIATION* (Oran R. Young ed., 1975); I. WILLIAM ZARTMAN & MAUREEN R. BERMAN, *THE PRACTICAL NEGOTIATOR* (1982).

¹⁰ E.g., *COMMUNICATION AND NEGOTIATION* (Linda L. Putnam & Michael E. Roloff eds., 1992).

¹¹ Carrie Menkel-Meadow provides a concise history of this development. See Carrie Menkel-Meadow, *Aha? Is Creativity Possible in Legal Problem Solving and Teachable in Legal Education?*, 6 HARV. NEGOT. L. REV. 97, 97-98 (2001).

¹² Chester Karrass is an exception. See KARRASS, *supra* note 1. An experienced aerospace industry negotiator, he peppered his book *The Negotiating Game* with examples from his practice but also grounded the discussion in sociological theory and methods. The book is based on his PhD thesis. Chester L. Karrass, *A Study of the Relationship of Negotiator Skill and Power as Determinants of Negotiation Outcome* (1968) (unpublished Ph.D. dissertation, University of Southern California).

¹³ See ROBERT STEVENS, *LAW SCHOOL: LEGAL EDUCATION IN AMERICA FROM THE 1850S TO THE 1980s*, at 214-16, 229-30, 240-41 (1983) (describing the development of clinical legal education); M.H. Hoeflich, *Plus Ça Change, Plus C'est la Même Chose: The Integration of Theory and Practice in Legal Education*, in 1 *THE HISTORY OF LEGAL EDUCATION IN THE UNITED STATES: COMMENTARIES AND PRIMARY SOURCES* 861 (Steve Sheppard ed., 1999) (same).

¹⁴ The materials ultimately were published by Foundation Press in the late 1970s. See GARY BELLOW & BEA MOULTON, *THE LAWYERING PROCESS: MATERIALS FOR CLINICAL INSTRUCTION IN ADVOCACY* (1978). They were then republished in separate skill-specific paperback editions in the early 1980s. See, e.g., GARY BELLOW & BEA MOULTON, *THE LAWYERING PROCESS: NEGOTIATION* (1981); GARY BELLOW & BEA MOULTON, *THE LAWYERING PROCESS: ETHICS AND PROFESSIONAL RESPONSIBILITY* (1981).

¹⁵ See RICHARD A. POSNER, *PUBLIC INTELLECTUALS: A STUDY OF DECLINE* (2001); *The Future of the Public Intellectual: Panel Discussion*, THE NATION, Feb. 12, 2001, at 25; Richard C. Lewontin, *The*

The social-scientific study of bargaining by legal scholars began in earnest in the 1980s, a little over a decade after the first version of the Bellow and Moulton materials had begun to circulate. The work of Gerald Williams and his colleagues at Brigham Young University¹⁶ usually is given as the starting point, though Cornelius Peck published a casebook on legal negotiation a few years earlier,¹⁷ and Harry Edwards and Jim White published another one at about the same time,¹⁸ and both of these books drew extensively on social science research.¹⁹ Perhaps spurred on by the “two cultures” debate at Cambridge in the nineteen-fifties,²⁰ law study, like humanities education generally, envied its scientific cousins.²¹ Science provided objectivity, precision, parsimonious expression, elegance, and cumulative learning, while humanities based alternatives offered only indeterminacy, personal opinion, ad hoc perspective, reasonable disagreement, and situational truth in return.²² Science also had a positive agenda with prescriptions for how to behave effectively, not just a critical one with descriptions of

Triumph of Stephen Jay Gould, in N.Y. REV. OF BOOKS, Feb. 14, 2008, at 39 (defining “public intellectual”); Alan Lightman, *The Role of the Public Intellectual*, MIT COMM. F., Jan. 5, 2000, <http://web.mit.edu/comm-forum/papers/lightman.html>.

¹⁶ GERALD R. WILLIAMS, *LEGAL NEGOTIATION AND SETTLEMENT* (1983).

¹⁷ CORNELIUS J. PECK, *CASES AND MATERIALS ON NEGOTIATION* (1972).

¹⁸ HARRY T. EDWARDS & JAMES J. WHITE, *THE LAWYER AS A NEGOTIATOR: PROBLEMS, READINGS AND MATERIALS* (1977).

¹⁹ Richard Walton and Robert McKersie did their highly regarded work even earlier. They were not legal academics, but because they studied labor relations, their writing overlapped with legal scholarship to a considerable extent. See WALTON & MCKERSIE, *supra* note 5.

²⁰ Robert J. Condlin, “*What’s Really Going On?*” *A Study of Lawyer and Scientist Inter-Disciplinary Discourse*, 25 RUTGERS COMPUTER & TECH. L.J. 181, 181-206 (1999) (describing the “Two Cultures” debate). There now are three cultures. See JEROME KAGAN, *THE THREE CULTURES: NATURAL SCIENCES, SOCIAL SCIENCES AND THE HUMANITIES IN THE 21ST CENTURY* (2009).

²¹ Robert Stevens shows how legal education’s interest in the social sciences predates the “two cultures” debate by several decades. See STEVENS, *supra* note 13, at 131-41.

²² Some scientists also criticized humanities thinkers for being unduly sympathetic to, or at least not sufficiently critical of, the rise of fascism and National Socialism. See C.P. SNOW, *THE TWO CULTURES: A SECOND LOOK* 7 (1963) (“[N]ine out of ten of those who have dominated literary sensibility in our time [were] . . . not only politically silly, but politically wicked. . . . [T]he influence of all they represent [brought] Auschwitz that much nearer.”). The difference between scientific and humanities based thinking can be overstated, of course. Science can be partisan, even extremely so. Recently, for example, David Card, a former winner of the John Bates Clark Prize, discovered that studies finding the minimum wage to have a statistically significant disemployment effect were overrepresented in the scholarly literature. He concluded that there were rewards within the field of economics for producing scholarship that confirmed the idea that the minimum wage caused unemployment and punishment for scholarship that found otherwise. He stopped writing about this topic, however, when “a lot of his friends . . . became very angry [at] or disappointed [in him because] . . . they thought that in publishing [his] work [he was] being [a] traitor to the cause of economics as a whole.” See Douglas Clement, *Interview with David Card*, THE REGION, Dec. 2006, <http://www.minneapolisfed.org/pubs/region/06-12/card.cfm>. See also Gregory Mitchell, *Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law*, 43 WM. & MARY L. REV. 1907, 2018 (2002) (“[M]arket forces may be driving [behavioral decision theorists] to puffery and exaggeration [B]lanket irrationality probably sells better than a nuanced, contextualized picture of human behavior full of individual . . . differences in rationality and lacking in cognitive universals.”). Humanities based thinking also can be objective. See Robert A. Prentice, *Chicago Man, K-T Man, and the Future of Behavioral Law and Economics*, 56 VAND. L. REV. 1663, 1719 (2003) (“Research results in psychology are roughly as consistent as those in physics, and as reliable as many prominent findings in medical science.”) (citations omitted).

how behavior had fallen short.²³ To be scientific was thought to be first among equals in the body of scholars and this had an irresistible allure for legal academics who, at that time, almost obsessively doubted the legitimacy of their place in the academy.²⁴

Initially, legal bargaining theory borrowed heavily from psychiatric, psychological, and political science models (and, to a lesser extent, those of economics, game theory and social choice theory), where the systematic study of social behavior had a longer and more developed history. But then, as in the writings of Williams and his colleagues, it began to produce original work grounded in the direct study of lawyer bargainers.²⁵ This shift from anecdote to science is reflected, for example, in the changing makeup of the Wiggins and Lowry reader,²⁶ the principal legal negotiation anthology. Entries in the book's second edition, taken in larger measure from social scientific (and ersatz social scientific) scholarship, replaced or supplemented the practitioner contributions that predominated in the first edition, to give the anthology a new and decidedly scientific look. At the same time, the principal scholarly journals in the field, the *Ohio State Journal on Dispute Resolution* and the *Harvard Negotiation Law Review*, began to publish social-science based bargaining scholarship with increasing

²³ This point usually is illustrated by comparing Law & Economics scholarship with that of Critical Legal Studies. See, e.g., Richard A. Posner, *Social Norms, Social Meaning, and Economic Analysis of Law: A Comment*, 27 J. LEGAL STUD. 553, 565 (1998) (describing law and economics as a “progressive” program and critical legal studies a “degenerate” one).

²⁴ The best illustration is still Thomas F. Bergin, *The Law Teacher: A Man Divided Against Himself*, 54 VA. L. REV. 637 (1968). Science envy may persist among legal bargaining scholars to the present day. The newest ABA-sponsored negotiation manual, for example, describes itself as engaged in “science.” See BARRY GOLDMAN, *THE SCIENCE OF SETTLEMENT: IDEAS FOR NEGOTIATORS* (2008). Jeffrey Rachlinski also is emphatic about Behavioral Decision Theory’s claim to being scientific. See Jeffrey J. Rachlinski, *The “New” Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters*, 85 CORNELL L. REV. 739, 750 (2000) (“The field [of Behavioral Decision Theory] is modeled after successful research programs in the study of perception and memory. . . . [Its] ultimate goal . . . is . . . to produce an accurate account of human judgment and decision making.”) (citing Daniel Kahneman & Amos Tversky, *On the Reality of Cognitive Illusions*, 103 PSYCHOL. REV. 582 (1996)). But see generally Joseph Vining, *The Resilience of Law*, in *LAW AND DEMOCRACY IN THE EMPIRE OF FORCE* (H. Jefferson Powell & James Boyd White eds., forthcoming 2009), available at <http://ssrn.com/abstract=1147665> (describing why law is not and cannot be a social science).

²⁵ See generally WILLIAMS, *supra* note 16. Williams and his colleagues published the results of a follow up study in 1991. See Lloyd Burton et al., *Feminist Theory, Professional Ethics, and Gender-Related Distinctions in Attorney Negotiating Styles*, 1991 J. DISP. RESOL. 199. Andrea Kupfer Schneider has updated Williams’ work and conducted extensive empirical research of her own. See Andrea Kupfer Schneider, *Shattering Negotiation Myths: Empirical Evidence on the Effectiveness of Negotiation Style*, 7 HARV. NEGOT. L. REV. 143, 148 (2002); Andrea Kupfer Schneider & Nancy Mills, *What Family Lawyers Are Really Doing When They Negotiate*, 44 FAM. CT. REV. 612 (2006). I discuss Williams’s and Schneider’s work at length in Robert J. Condlin, “*Every Day and in Every Way We Are All Becoming Meta and Meta,*” or *How Communitarian Bargaining Theory Conquered the World (of Bargaining Theory)*, 23 OHIO ST. J. ON DISP. RESOL. 231, 278-89 (2008). The Williams/Schneider research is about lawyer bargainers more than legal bargaining, since it is based on lawyers’ self-reports about how they bargain rather than direct observation of bargaining behavior.

²⁶ CHARLES B. WIGGINS & L. RANDOLPH LOWRY, *NEGOTIATION AND SETTLEMENT ADVOCACY: A BOOK OF READINGS* (2d ed. 2005). The earlier edition of the book was published in 1997. The *Negotiator’s Fieldbook*, a new ABA deskbook on negotiation, has the same scientific emphasis. ABA SECTION OF DISPUTE RESOLUTION, *THE NEGOTIATOR’S FIELDBOOK* (Andrea Kupfer Schneider & Christopher Honeyman eds., 2006).

frequency.²⁷ The literature of storytelling and anecdote did not disappear altogether, of course,²⁸ but it went into a pronounced eclipse, so that often it now appeared that the social-scientific study of legal bargaining was the only scholarly game in town.²⁹ The wisdom of that shift in emphasis, almost seismic in its proportions, is the subject of this article.

Social science writing about bargaining is too voluminous, varied, and complex to examine in its entirety, so I will limit my discussion to a part of it that, for the moment at least, seems to hold great fascination for legal bargaining scholars: the Prospect Theory³⁰ of Daniel Kahneman and Amos Tversky.³¹ Initially, Prospect Theory³² had its largest

²⁷ Journals in social psychology, economics, organizational theory, and related fields published articles on bargaining long before law journals, of course, but little of this work made its way into legal bargaining scholarship. See, e.g., *Issue on Negotiation: Behavioral Perspectives*, 27 AM. BEHAV. SCIENTIST 131-279 (1983).

²⁸ Some commentators combine the two approaches. See, e.g., Ian Weinstein, *Don't Believe Everything You Think: Cognitive Bias in Legal Decision Making*, 9 CLINICAL L. REV. 783 (2003) (using Behavioral Decision Theory concepts to analyze bargaining scenarios from real life law practice); G. RICHARD SHELL, *BARGAINING FOR ADVANTAGE: NEGOTIATION STRATEGIES FOR REASONABLE PEOPLE* (2d ed. 2006) (using social psychology concepts to analyze real world business negotiations).

²⁹ But see Deepak Malhotra & Max H. Bazerman, *Psychological Influence in Negotiation: An Introduction Long Overdue*, 34 J. MGMT. 509-31 (2008) (describing the surprisingly “limited extent to which social influence research has penetrated the field of negotiation”). It is not unusual for ideas to dominate a field of study when they are first introduced, at least for a short time. See CLIFFORD GEERTZ, *THE INTERPRETATION OF CULTURES* 3 (1973) (“[C]ertain ideas burst upon the intellectual landscape with a tremendous force. The resolve so many fundamental problems at once that they seem also to promise that they will resolve all fundamental problems, clarify all obscure issues.”) (citing SUSANNE LANGER, *PHILOSOPHY IN A NEW KEY* (1953)).

³⁰ Daniel L. Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision under Risk*, 47 ECONOMETRICA 263, 274 (1979) [hereinafter Kahneman & Tversky, *Prospect Theory*] (“[This] paper presents an . . . account of individual decision making under risk, called prospect theory . . . developed for simple prospects with monetary outcomes and stated probabilities . . .”). I will use the term Prospect Theory to refer mostly to their work on heuristics and biases, although Kahneman and Tversky divided their research into three separate and distinct programs. Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 AM. ECON. REV. 1449, 1449 (2003) [hereinafter Kahneman, *Maps*] (noting that the “three separate programs of research” included an exploration of the heuristics and biases used to make judgment under uncertainty, the development of “prospect theory, a model of choice under risk,” and a study of “framing effects and . . . their implications for rational-agent models”). The term is used this way colloquially and it will introduce no confusion into the discussion for me to use it in that way as well. Prospect Theory also is a less cumbersome term than “heuristics and biases based system of decision making and judgment.” Prospect Theory is part of a larger body of scholarship that goes variously by the names of Behavioral Decision Theory, Behavioral Economics, or Behaviorism, and I will use these terms interchangeably with Prospect Theory as well. See Gregory Mitchell, *Why Law and Economics' Perfect Rationality Should Not Be Traded for Behavioral Law and Economics' Equal Incompetence*, 91 GEO. L.J. 67, 78-83 (2002) (describing the debate over names); Ward Edwards, *Behavioral Decision Theory*, 12 ANN. REV. PSYCHOL. 473, 473 (1961) (coining the phrase “behavioral decision theory” to refer to “psychological and economic theories of riskless and risky decision making, the theory of games, and the experiments relating to these theories.”). None of the foregoing distinctions are critical to the present non-technical discussion.

³¹ Professor Kahneman was awarded the 2002 Sveriges Riksbank (Bank of Sweden) Prize in Economic Sciences in Memory of Alfred Nobel (the Nobel Memorial Prize in Economics) for his contribution to the development of the Theory. See Kahneman, *Maps*, *supra* note 30, at 1449 (revised version of Professor Kahneman's Bank of Sweden Prize lecture). Professor Tversky died in 1996. See News Release, Stanford University, Amos Tversky, Leading Decision Researcher, Dies at 59 (June 5, 1996), *available at*

impact on legal scholarship in the fields of private law doctrine, administrative regulation, evidence, and jury deliberation,³³ but now it also is beginning to be used to

<http://news-service.stanford.edu/pr/96/960605tversky.html>. Prospect Theory does not lack for skeptics and critics both in the social sciences and in law. See, e.g., Jennifer Arlen, *Comment: The Future of Behavioral Economic Analysis of Law*, 51 VAND. L. REV. 1765 (1998); Jonathan L. Cohen, *Can Human Irrationality Be Experimentally Demonstrated?*, 4 BEHAV. & BRAIN SCI. 317 (1981); Daniel A. Farber, *Toward a New Legal Realism*, 68 U. CHI. L. REV. 279 (2001); Gerd Gigerenzer, *How to Make Cognitive Illusions Disappear: Beyond "Heuristics and Biases,"* 2 EUR. REV. SOC. PSYCHOL. 83 (1991); Robert A. Hillman, *The Limits of Behavioral Decision Theory in Legal Analysis: The Case of Liquidated Damages*, 85 CORNELL L. REV. 717 (2000); Samuel Issacharoff, *Can There Be a Behavioral Law and Economics?*, 51 VAND. L. REV. 1729 (1998); Mark Kelman, *Behavioral Economics as Part of a Rhetorical Duet: A Response to Jolls, Sunstein, and Thaler*, 50 STAN. L. REV. 1577 (1998); Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499 (1998); Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1938-95; Mitchell, *Why Law and Economics*, *supra* note 30, at *passim*; Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551 (1998); Robert E. Scott, *The Limits of Behavioral Theories of Law and Social Norms*, 86 VA. L. REV. 1603 (2000); Thomas S. Ulen, *The Growing Pains of Behavioral Law and Economics*, 51 VAND. L. REV. 1747 (1998).

³² Prospect Theory has a charmingly entitled sibling (or perhaps offspring), known as "Happiness Research," which soon may overtake it in popular appeal. See Sue M. Halpern, *Are You Happy?*, 55 N.Y. REV. OF BOOKS, Apr. 3, 2008, at 24-27 (describing the field of Happiness Research). In 2007, for example, the University of Chicago Law School held a conference on the *Legal Implications of the New Happiness Research*. The papers from the conference were published in a special issue of the *Journal of Legal Studies*, available at <http://www.journals.uchicago.edu/toc/jls/2008/37/s2>. Two of the conference participants subsequently published a Happiness Research-based book on economic policy (see RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (2008)), which became the basis of a major presidential candidate's economic policy platform. See John Cassidy, *Economics: Which Way for Obama?*, 55 N.Y. REV. OF BOOKS 30-34 (June 12, 2008) (noting that "[i]n a number of cases, the measures that Thaler and Sunstein recommend are mirrored by proposals in Obama's voluminous policy papers, which can be downloaded from his Web site"). Legal bargaining theorists also have begun to incorporate Happiness Research into bargaining scholarship. See, e.g., John Bronsteen, Christopher Buccafusco, & Jonathan S. Masur, *Hedonic Adaptation and the Settlement of Civil Lawsuits*, 108 COLUM. L. REV. 1516 (2008). Not everyone is happy with Happiness Research. Noting that its central conception of "hedonic flow" is based on Jeremy Bentham's idea of pleasure as a "single sensation," Martha Nussbaum characterizes Happiness Research (repeating Mill's criticism of Bentham), as expressing "the empiricism of one who has had little experience." Martha C. Nussbaum, *Who Is the Happy Warrior? Philosophy Poses Questions to Psychology*, 37 J. LEGAL STUD. S81, S82-S83 (2008), available at <http://www.journals.uchicago.edu/doi/pdf/10.1086/587438>. Nussbaum concludes that "the appeal to subjective well-being, as currently used in the psychological literature, is not utterly useless, but at present it is so riddled with conception confusion and normative naïveté that we had better pause and sort things out before going any further." *Id.* at S108.

³³ Prentice, *Chicago Man*, *supra* note 22, at 1755-64 (describing the "Implications for Legal Theory" of heuristics and biases research); Jeffrey Rachlinski, *The "New" Law and Psychology: A Reply to Critics, Skeptics and Cautious Supporters*, 85 CORNELL L. REV. 739, 766 (2000) ("The new law and psychology adds the study of litigants, manufacturers, tortfeasors, contracting parties, corporate officers, spouses, parents, fiduciaries, and property owners to the research agenda."). See also note 217, *infra*. The Theory's most highly visible scholarly contribution is its challenge to the empirical foundations and decision model of Law & Economics scholarship. See Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1910 n.5 ("Within the last five years alone, five law reviews have conducted symposia addressing the question of how psychology and behavioral economics may inform legal decision making."). The debate between the two competing conceptions of rational choice is now largely on hold, with both sides claiming victory. Compare Mitchell, *Why Law and Economics*, *supra* note 30, at 72 (legal decision theory "cannot lay claim to empirical validity superior to that of the perfect rationality assumption"), and at 76 (concluding that the "development of a general model of legal behavior that is both reasonably descriptive and

reconceptualize legal bargaining theory along more explicitly social-psychological lines.³⁴ This latter project is gaining momentum in the legal bargaining literature notwithstanding that there are substantial reasons to be skeptical of it, and I shall attempt to explain some of those reasons here.³⁵

Prospect Theory also is too large and complex a phenomenon to examine fully in a single discussion, so after a brief description of its basic theoretical framework, I will focus discussion on one of the theory's central concepts, that of "anchoring and adjustment" (hereafter anchoring), and the role it allegedly plays, or can be made to play, in influencing bargaining outcomes.³⁶ Of all the Prospect Theory concepts, anchoring

parsimonious [is] unlikely"); Matthew D. Adler & Eric A. Posner, *Happiness Research and Cost Benefit Analysis*, 37 J. LEGAL STUD. S253, S255 (2008), available at <http://www.journals.uchicago.edu/doi/pdf/10.1086/590188> ("The [happiness] literature does not undermine the normative basis of [cost-benefit analysis]—does not even address it—and its empirical findings do not contradict the main empirical premises of [cost-benefit analysis]."), with Prentice, *Chicago Man*, *supra* note 22, at 1774 ("[T]he debate over whether the economists' Chicago Man or the psychologists' K-T Man better describes reality is over; the psychologists won."), and Rachlinski, *The New Law and Psychology*, *supra* note 24, at 766 ("The new law and psychology has begun to blaze a new trail and to inspire unique questions about law that legal scholars would not otherwise have asked."); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1053 (2000) (suggesting that a law and behavioral science perspective may provide "a more nuanced understanding of human behavior"). For a middle view, see Frank B. Cross, *In Praise of Irrational Plaintiffs*, 86 CORNELL L. REV. 1, 32 (2000) ("The prevailing battle between law and economics and behavioral economics is . . . misguided. . . . Behavioralism is not so much an alternative to law and economics as it is a complement. It supplements the classic model and explains why deviations may occur from the model, but it does not supplant that model."). See also note 42, *infra*.

³⁴ Russell Korobkin, *Aspirations and Settlement*, 88 CORNELL L. REV. 1, 14 (2002) (describing studies by legal bargaining theorists that rely on Prospect Theory to construct theories of settlement) (citing Jeffrey J. Rachlinski, *Gains, Losses, and the Psychology of Litigation*, 70 S. CAL. L. REV. 113, 116 (1996); Russell Korobkin & Chris Guthrie, *Psychological Barriers to Litigation Settlement: An Experimental Approach*, 93 MICH. L. REV. 107, 109 (1994); Chris Guthrie, *Framing Frivolous Litigation: A Psychological Theory*, 67 U. CHI. L. REV. 163, 168-69 (2000)); *id.* at 53-60 (describing prescriptive advice for bargainers based on Prospect Theory findings); Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 514-19 (describing the application of Prospect Theory insights to the development of bargaining technique); Dan Orr & Chris Guthrie, *Anchoring, Information, Expertise, and Negotiation: New Insights from Meta-Analysis*, 21 OHIO ST. J. ON DISP. RESOL. 597, 624-28 (2006) (same).

³⁵ Accord Chad M. Oldfather, *Heuristics, Biases, and Criminal Defendants*, 91 MARQ. L. REV. 249 (2007) ("My purpose here is . . . to introduce a note of caution with respect to the application of [Behavioral Law and Economics] research to the workings of the criminal justice system . . .").

³⁶ As in any "telephone game," descriptions of the various Prospect Theory concepts vary somewhat as they are repeated from writer to writer. For example, Matthew Adler describes Prospect Theory itself as a heuristic. See Matthew D. Adler, *Bounded Rationality and Legal Scholarship*, in THEORETICAL FOUNDATIONS OF LAW AND ECONOMICS 137 (Mark White ed., forthcoming Jan. 2009) (manuscript at 14), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1095874 ("one heuristic identified by Tversky and Kahneman [is] 'prospect theory'"). But Daniel Kahneman describes it as a "model of choice under risk." See Kahneman, *Maps*, *supra* note 30, at 1449. Prospect Theory might have abandoned, or at least downgraded, the concept of anchoring. See Daniel Kahneman & Shane Frederick, *Representativeness Revisited: Attribute Substitution in Intuitive Judgment*, in HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 49, 56 (Thomas Gilovich et al. eds., 2002) [hereinafter HEURISTICS AND BIASES] ("It has become evident that an *affect heuristic* should replace anchoring in the list of major general-purpose heuristics.") (citation omitted); Fritz Strack & Thomas Mussweiler, *Heuristic Strategies for Estimation Under Uncertainty: The Enigmatic Case of Anchoring*, in FOUNDATIONS OF SOCIAL COGNITION: A FESTSCHRIFT IN HONOR OF ROBERT S. WYER, JR. 79, 92-93 (Galen V. Bodenhausen & Alan J. Lambert

has the closest and most obvious connection to negotiation outcome, even to the point of sometimes providing the precise terms of settlement and the mechanism by which those terms are reached. It also is the subject of several highly regarded articles by prominent scholars writing in leading journals,³⁷ and is perhaps the most thoroughly analyzed and empirically documented of the Prospect Theory concepts,³⁸ at least in the legal bargaining literature. Any difficulties encountered in incorporating the concept into legal bargaining theory will recur many times over in working with other parts of the Prospect Theory framework. All of this makes anchoring an excellent, perhaps even the best, surrogate for examining Prospect Theory's contributions to legal bargaining theory in general.

II. Prospect Theory Described

Prospect Theory is a theory of human decision-making under conditions of risk and uncertainty.³⁹ It is a cognitive theory, not exclusively behaviorist or mentalist, concerned with the way in which external effects on behavior are mediated by mental processes arising in the mind of the actor.⁴⁰ It is descriptive, not normative, reporting on

eds., 2003) (“In retrospect, anchoring has lost its status as a unique phenomenon with its own regularities. Instead, it has found its place as a special case of basic principles that served as the pillars of a psychological subdiscipline whose explanatory power has proved to be exceptionally strong.”). *But see* Daniel T. Gilbert, *Inferential Correction*, in *HEURISTICS AND BIASES*, *supra*, at 167, 167 (anchoring and adjustment “describes the process by which the human mind does virtually all of its inferential work”); Manish Agrawal & Kaushal Chari, *Learning Negotiation Support Systems in Competitive Negotiations: A Study of Negotiation Behaviors and System Impacts*, 5 *INT’L J. INTELLIGENT INFO. TECH.* 1 (forthcoming 2009) (manuscript at 8), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=904619 (“Anchoring and framing are the most important of the [cognitive biases identified by Kahneman and Tversky].”).

³⁷ Orr & Guthrie, *Anchoring*, *supra* note 34; Chris Guthrie & Jeffrey J. Rachlinski, *Insurers, Illusions of Judgment & Litigation*, 59 *VAND. L. REV.* 2017, 2027-33 (2006) (describing the effects of anchoring on bargaining); Russell Korobkin & Chris Guthrie, *Heuristics and Biases at the Bargaining Table*, 87 *MARQ. L. REV.* 795, 799-800 (2004).

³⁸ Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 513 (“the application of anchoring and insufficient adjustment to negotiation research” “has already been made in the existing literature”) (citations omitted); Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2026-33 (describing anchoring studies); Orr & Guthrie, *Anchoring*, *supra* note 34, at 608-11, 614-23 (same).

³⁹ Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 263, 274; Kahneman, *Maps*, *supra* note 30, at 1449, 1460. Kahneman and Tversky described decisions under risk as presenting a choice between “prospects or gambles” among alternatives with different probabilities, thus the name Prospect Theory. Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 263 (“Decision making under risk can be viewed as a choice between prospects or gambles.”). Not everyone agrees on the origins of the name. *See* Thayer Watkins, Kahneman and Tversky’s Prospect Theory, <http://www.sjsu.edu/faculty/watkins/prospect.htm> (last visited Jan. 13, 2009) (“Daniel Kahneman and Amos Tversky called their studies of how people manage risk and uncertainty *Prospect Theory* for no other reason than that it is a catchy, attention-getting name.”). There is a revised version of the theory, called cumulative Prospect Theory. Amos Tversky & Daniel Kahneman, *Advances in Prospect Theory: Cumulative Representation of Uncertainty*, 5 *J. RISK & UNCERTAINTY* 297 (1992).

⁴⁰ *See* Galen V. Bodenhausen & Alan J. Lambert, *Foundations of Social Cognition: An Introduction*, in *FOUNDATIONS OF SOCIAL COGNITION*, *supra* note 36, at 1, 2 (“Rather than concede that the mind must forever remain a murky and theoretically irrelevant black box, social cognition researchers sought to specify the cognitive structures and processes that putatively shape our understanding of social situations and that mediate our reactions to them.”); Rachlinski, *The New Law and Psychology*, *supra* note 24, at 740

how people make decisions, not on how they should make them.⁴¹ It is known best for its critique (as psychologically and empirically unrealistic)⁴² of the expected utility model of rational choice associated with neoclassical economics⁴³ and for the development of an

(“[Prospect Theory] is a descendant of the cognitive revolution, which displaced behavioral psychology in the 1960s as the leading school of thought in experimental psychology. Behaviorists make no inferences about human thought processes, which makes their work analogous to microeconomics. By contrast, human thought processes are the targets of study for cognitive psychologists. [Prospect Theory] relies upon inferences that psychologists make about cognitive processes and is therefore a radical departure from behaviorism and from microeconomic theory.”).

⁴¹ Kahneman, *Maps*, *supra* note 30, at 1456 (“One novelty of prospect theory was that it was explicitly presented as a formal descriptive theory of the choices that people actually make, not as a normative model.”); JAMES MONTIER, BEHAVIOURAL FINANCE: INSIGHTS INTO IRRATIONAL MINDS AND MARKETS 20 (2002) (“[U]nlike expected utility theory which concerns itself with how decisions under uncertainty should be made (a prescriptive approach), [P]rospect [T]heory concerns itself with how decisions are actually made (a descriptive approach.)” (emphases omitted); Kahneman, *Maps*, *supra* note 30, at 1456 (describing how Prospect Theory was “a departure from a long history of choice models that served double duty as normative logics and as idealized descriptive models”); Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1943 (“Behavioral decision theory . . . offers a descriptive account of judgment . . .”). Some bargaining theorists argue for the adoption of Prospect Theory techniques on the ground that they produce better bargaining practice. See, e.g., Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 525 (“in many cases, negotiators do want to claim as much as possible . . . [in such cases] we see the honest use of the psychology of influence as an appropriate and ethical set of tools”). See also note 217 *infra* and references listed there.

⁴² Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 263 (“The present paper describes several classes of choice problems in which preferences systematically violate the axioms of expected utility theory. In the light of these observations, we argue that utility theory, as it is commonly interpreted and applied, is not an adequate descriptive model . . .”); Kahneman, *Maps*, *supra* note 30, at 1449 (criticizing rational agent models as “psychologically unrealistic”). But see Oldfather, *supra* note 35, at 260 (“the greater descriptive accuracy provided by behavioral economics might be more apparent than real”); Martha Nussbaum, *Who Is the Happy Warrior?*, *supra* note 32, at S86, S88, S91 (arguing that the subjective state psychologists’ empirical studies of feelings are too conceptually breezy to discover accurate information about real life phenomena, using Daniel Kahneman as an example); Mitchell, *Why Law and Economics*, *supra* note 30, at 120-23 (questioning the greater realism and predictive power of Behavioral Decision Theory).

⁴³ Kahneman, *Maps*, *supra* note 30, at 1454 (describing the “compound cognitive system” sketched by Prospect Theory as different “in important respects from another paragon, the rational agent assumed in economic theory”), and at 1470 (“Findings [of Prospect Theory] indicate that the traditional separation between belief and preference in analyses of decision making is psychologically unrealistic”). See also Cass R. Sunstein, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175, 1175-79 (1997) (arguing that Behavioral Decision Theory will be used principally to modify rather than undermine existing theories of rational choice); Christine Jolls, Cass R. Sunstein, & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1547 (1998) (same); Posner, *Rational Choice*, *supra* note 31, at 1558-61 (arguing that Behavioral Decision Theory is primarily a means of attacking law and economics rather than an affirmative foundation for a new model of choice). But see Rachlinski, *The New Law and Psychology*, *supra* note 24, at 750 (Behavioral Decision Theory’s “emphasis on errors is not merely an effort to dislodge rational-choice theory. Rather, BDT is an attempt to develop a novel theory of human decision making.”), and at 764-65 (“The application of [Behavioral Decision Theory] to law will do more than just provide another criticism of, or addendum to, law and economics. A legal scholar familiar with the research in BDT will ask different questions about law than scholars schooled in either law and economics or traditional legal analysis.”); Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1918 (“The breadth of legal decision theory’s assault on the rationality assumption cannot be overstated: legal decision theorists collectively contend that all judgments and decisions of legal importance—whether made by ordinary citizens or criminals, litigants or lawyers, judges or jurors—involve imperfect psychological processes that consistently cause irrational judgments and choices to be made.”); Prentice,

alternative model based on a set of cognitive heuristics and biases (anchoring, framing, reactive devaluation, and the like)⁴⁴ growing out of the concept of “bounded rationality,”⁴⁵ that both inform and distort decision making and judgment.⁴⁶

The components of the theory were described first by the psychologists⁴⁷ Daniel Kahneman and Amos Tversky in a now famous 1979 article in the journal

Chicago Man, *supra* note 22, at 1765-73 (describing the relationship between Behavioral Decision Theory and Law & Economics).

⁴⁴ In his Bank of Sweden Prize lecture Kahneman described his work with Tversky as compris[ing] three separate programs of research The first explored the heuristics that people use and the biases to which they are prone in various tasks of judgment under uncertainty, including predictions and evaluations of evidence. The second was concerned with [P]rospect [T]heory, a model of choice under risk and with loss aversion in riskless choice. The third . . . dealt with framing effects and with their implications for rational-agent models.

Kahneman, *Maps*, *supra* note 30, at 1449 (citations omitted).

⁴⁵ See Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99, 114 (1955) (describing “a choosing organism of limited knowledge and ability” as a substitute for economic man); Herbert A. Simon, *Rationality as Process and as Product of Thought*, AM. ECON. REV., May 1978, at 1, 10 (same); Herbert A. Simon, *Information Processing Models of Cognition*, 30 ANN. REV. PSYCHOL. 363 (1979) (same). See also Kahneman, *Maps*, *supra* note 30, at 1449 (“Herbert A. Simon had proposed much earlier that decision makers should be viewed as boundedly rational, and had offered a model in which utility maximization was replaced by satisficing.”); Gerd Gigerenzer & Peter M. Todd, *Fast and Frugal Heuristics*, in SIMPLE HEURISTICS THAT MAKE US SMART 3, 12-14 (Gerd Gigerenzer et al. eds., 1999) [hereinafter SIMPLE HEURISTICS] (describing Simon’s role in developing the concept of bounded rationality). The heuristics and biases conception of decision making and judgment differs from the conception of “bounded rationality” principally in the nature of the processes involved. “Bounded rationality assumes that people are using a rational inference procedure; they are just limited in their ability to fully exploit it. The [heuristics and biases] approach assumes that people are using an arational procedure that approximates rational inference.” Steven A. Sloman, *Rational Versus Arational Models of Thought*, in THE NATURE OF COGNITION 557, 575 (Robert J. Sternberg ed., 1999).

⁴⁶ See Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124 (1974) (describing the relationship of heuristics to biases), and at 1131 (“These heuristics are highly economical and usually effective, but they lead to systematic and predictable errors.”); Kahneman, *Maps*, *supra* note 30, at 1450 (“intuitive thinking can also be powerful and accurate”); Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2024 (“Often, heuristics are adaptive, leading to good decision outcomes; other times, however, they can lead people astray.”) (citation omitted); Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 796 n.5 (“While scholars in the Tversky-Kahneman tradition tend to emphasize how heuristics can lead decision makers astray . . . scholars in the Gigerenzer tradition tend to emphasize how helpful heuristics can be”) (citation omitted); Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199, 203-06 (2006) (describing “judgment errors” and “departures from expected utility theory” produced by bounded rationality); J.D. Trout, *Paternalism and Cognitive Bias*, 24 LAW & PHIL. 393, 396-408 (2005) (overview of cognitive biases); R.E. Nisbett & E. Borgida, *Attribution and the Psychology of Prediction*, 32 J. PERSONALITY & SOC. PSYCHOL. 932, 935 (1975) (describing how the results of heuristics and biases research have “bleak implications” for human rationality); Max H. Bazerman & Margaret A. Neale, *Heuristics in Negotiation: Limitations to Effective Dispute Resolution*, in JUDGMENT AND DECISION MAKING: AN INTERDISCIPLINARY READER 311, 317 (Hal R. Arkes & Kenneth R. Hammond eds., 1986) (describing how “individuals are generally affected by systematic deviations from rationality”). Professor Weinstein provides helpful illustrations of how cognitive biases can be used in legal practice both to manipulate and inform decisions. See Weinstein, *supra* note 28, at 826-27.

⁴⁷ While they won the Bank of Sweden Prize for Economic Sciences, see note 31, *supra*, Kahneman and Tversky “viewed [their] research primarily as a contribution to psychology, with a possible contribution to economics as a secondary benefit. [They] were drawn into the interdisciplinary

Econometrica.⁴⁸ Intrigued by the fact that people both purchase insurance and play lotteries, a combination that would seem strange for a consistent rational agent,⁴⁹ Kahneman and Tversky, in a series of thought experiments based on the Allais paradox,⁵⁰ set out to examine empirically how people make decisions about risk. They discovered that most people employ “two generic modes of cognitive function, corresponding roughly to intuition and reasoning.”⁵¹ Reasoning is deliberate, rule-governed, self-monitoring, verbally explicit, and effortful, whereas intuiting is spontaneous, associative, automatic, impressionistic, and effortless.⁵² Most day-to-day judging is intuitive, occupying a position someplace between the automatic operation of perception (i.e., seeing, hearing, touching), and the deliberate operation of reasoning,⁵³ and like perception, it is “reference dependent.”⁵⁴ People determine their preferences by weighing

conversation by economists who hoped that psychology could be a useful source of assumptions for economic theorizing . . .” Kahneman, *Maps*, *supra* note 30, at 1449.

⁴⁸ Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 263.

⁴⁹ Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 269 (discussing the question of “why . . . people [would] spend so much money to purchase insurance policies at a price that exceeds the expected actuarial cost”), and at 281 (reporting evidence that “people prefer what is in effect a lottery ticket over the expected value of that ticket”), and at 286 (“In prospect theory, the overweighting of small probabilities favors both gambling and insurance, while the S-shaped value function tends to inhibit both behaviors.”).

⁵⁰ Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 265 (“the following pair of choice problems is a variation of Allais’ example”). The Allais paradox is a choice problem created by Maurice Allais, a French economist and winner of the 1988 Nobel Memorial Prize in Economics, to show that assumptions made by expected utility theory contradict the nature of real life decision making. See SCOTT PLOUS, *THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING* 84-87 (1993) (describing the Allais paradox). But see Maurice Allais, Abstract, *Allais Paradox*, in *THE NEW PALGRAVE DICTIONARY OF ECONOMICS* (Steven N. Durlauf & Lawrence E. Blume eds., 2d ed. 2008), available at http://www.dictionarofeconomics.com/article?id=pde2008_A000074 (“[T]here is no paradox once we accept the non-identity of monetary and psychological values and the importance of the distribution of cardinal utility about its average value.”).

⁵¹ Kahneman, *Maps*, *supra* note 30, at 1450 (describing System 1 (intuition) and System 2 (reasoning)). The System 1/System 2 framework represents a development over the two-stage “editing/evaluation” framework described in the original Prospect Theory article. See Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 274 (“Prospect Theory distinguishes two phases of the choice process: an early phase of editing and a subsequent phase of evaluation.”) See also Oldfather, *supra* note 35, at 251 (“Simply put, we lack the cognitive capacity to undertake the analyses necessary to be fully rational with respect to all of our choices and actions. As a consequence, we tend to rely on certain mental shortcuts—heuristics—that generate behavior that, while often at least roughly in accord with the prescriptions of rationality, will systematically depart from it in significant ways. And we are susceptible to certain distortions in our thought—biases—that render us unable to rationally assess the information with which we are presented.”) (citations omitted).

⁵² Kahneman, *Maps*, *supra* note 30, at 1451. Kahneman explains that “[t]he difference in effort provides the most useful indications of whether a given mental process should be assigned to [intuition or reason].” *Id.*

⁵³ Kahneman argues that the close relationship between perceiving and intuiting permits the “vast store of scientific knowledge available about perceptual phenomena [to] be a source of useful hypotheses about the workings of intuition.” Kahneman, *Maps*, *supra* note 30, at 1452. See also Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 277 (describing how the principles that govern the perceptual apparatus apply to perceptions of “non-sensory attributes such as health, prestige, and wealth.”). Professor Mitchell makes a similar distinction between “first and second order thoughts.” See Gregory Mitchell, *Second Thoughts*, (manuscript at 8), available at <http://papers.ssrn.com/abstract=1290243>.

⁵⁴ Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 277 (“An essential feature of the present theory is that the carriers of value are changes in wealth or welfare, rather than final states. . . . [V]alue

attitudes toward gains and losses in relation to a reference point, and measure their overall utility in terms of changes in wealth rather than states of wealth.⁵⁵ The reason for this, Kahneman explained, is that perceptions of

[u]tility cannot be divorced from emotion, and emotions are triggered by changes. A theory of choice that completely ignores feelings such as the pain of losses and the regret of mistakes is not only descriptively unrealistic, it also leads to prescriptions that do not maximize the utility of outcomes as they are actually experienced⁵⁶

Kahneman and Tversky found that in making intuitive judgments people attach more weight to certainty than probability, value gain more than loss (which encourages risk-averse behavior toward loss and risk-seeking behavior toward gain),⁵⁷ and compare alternatives in terms of decision weights⁵⁸ rather than outcome probabilities.⁵⁹ They also

should be treated as a function in two arguments: the asset position that serves as reference point, and the magnitude of the change . . . from that reference point.”); Kahneman, *Maps, supra* note 30, at 1456 (in Prospect Theory “the carriers of utility are gains and losses” from a reference point). See also REID HASTIE & ROBYN M. DAWES, RATIONAL CHOICE IN AN UNCERTAIN WORLD: THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING 216 (2001) (“The addition of a moveable reference level is the major difference between [P]rospect [T]heory and traditional economic utility theories.”). Kahneman argued that “it is quite surprising that in standard economic analyses the utility of decision outcomes is assumed to be determined entirely by the final state of endowment, and is therefore reference-independent.” Kahneman, *Maps, supra* note 30, at 1455. He named this assumption “Bernoulli’s error” after the eighteenth-century Dutch mathematician who first defined the expected utility hypothesis in terms of maximizing states of wealth. *Id.* (citing Daniel Bernoulli, *Exposition of a New Theory on the Measurement of Risk*, 22 *ECONOMETRICA* 23 (1954) (original work published 1738).

⁵⁵ Kahneman and Tversky credit Harry Markowitz with being the “first to propose that utility be defined on gains and losses rather than on final asset positions.” Kahneman & Tversky, *Prospect Theory, supra* note 30, at 276 (citing Harry Markowitz, *The Utility of Wealth*, 60 *J. POL. ECON.* 151 (1952)). See also ROBYN M. DAWES, EVERYDAY IRRATIONALITY: HOW PSEUDO-SCIENTISTS, LUNATICS, AND THE REST OF US SYSTEMATICALLY FAIL TO THINK RATIONALLY 195 (2001) (“[Prospect Theory] is based on the idea that people evaluate gains and losses . . . from some neutral or status quo point, an assumption [that is] consistent with the adaptation-level findings that occur not just in perception but in virtually all experience. That is, we adapt to a constant level of virtually any psychological dimension and find it to be neutral. In a similar way, we adapt to the reduced light in a movie theater when we enter it—finding it not particularly dark after a few seconds—and then readapt to the much brighter light outside when we leave the theater—finding it not to be unusually bright after a few seconds.”).

⁵⁶ Kahneman, *Maps, supra* note 30, at 1457.

⁵⁷ Kahneman & Tversky, *Prospect Theory, supra* note 30, at 279 (“A salient characteristic of attitudes to changes in welfare is that losses loom larger than gains.”).

⁵⁸ Kahneman & Tversky, *Prospect Theory, supra* note 30, at 280-84 (describing “the Weighting Function”). A decision weight is the marginal contribution of value over the status quo, judged from a decision maker’s frame of reference, assigned to a particular outcome. PLOUS, THE PSYCHOLOGY OF JUDGMENT, *supra* note 50, at 98 (“Prospect theory also differs from expected utility theory in the way it handles the probabilities attached to particular outcomes. Classical utility theory assumes that decision makers value a 50 percent chance of winning as exactly that: a 50 percent chance of winning. In contrast, prospect theory treats preferences as a function of ‘decision weights,’ and it assumes that these weights do not always correspond to probabilities.”) See also Ward Edwards, *Subjective Probabilities Inferred from Decisions*, 69 *PSYCHOL. REV.* 109 (1962) (first proposing the replacement of probabilities with more general weights).

⁵⁹ Kahneman & Tversky, *Prospect Theory, supra* note 30, at 277 (“decision weights do not coincide with stated probabilities”), and 280 (“Decision weights measure the impact of events on the desirability of prospects, and not merely the perceived likelihood of these events.”).

base judgments on accessible data rather than all relevant information,⁶⁰ suppress ambiguity and uncertainty associated with choice,⁶¹ favor transient emotions over long-term beliefs,⁶² construct analytical categories in terms of prototypes⁶³ rather than extensional variables,⁶⁴ make choices on the basis of feelings rather than rules,⁶⁵ transform difficult questions into easier ones as an aid to answering,⁶⁶ and do all of these

⁶⁰ Kahneman, *Maps*, *supra* note 30, at 1452 (“A defining property of intuitive thoughts is that they come to mind spontaneously, like percepts. The technical term for the ease with which mental contents come to mind is *accessibility*.”). While “[t]he impressions that become accessible in any particular situation are mainly determined . . . by the actual [physical] properties of the object of judgment . . . [a]nalogous effects . . . occur with more abstract stimuli . . . [and] make different thoughts accessible.” Kahneman, *Maps*, *supra* note 30, at 1453-54. Reliance on accessible information is popularly known as the “availability heuristic.” Tversky & Kahneman, *Judgment*, *supra* note 46, at 1127-28. It also has been called the “salience” or “vividness” heuristic. See, e.g., RICHARD NISBETT & LEE ROSS, HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT 8 (1980) (“people effectively assign inferential weight to physical and social data in proportion to the data’s salience and vividness”).

⁶¹ Kahneman & Tversky, *Prospect Theory*, *supra* note 30, at 271 (“In order to simplify the choice between alternatives, people often disregard components that the alternatives share, and focus on components that distinguish them. This approach to choice problems may produce inconsistent preferences . . .”) (citation omitted), and at 275 (describing how people simplify prospects “by rounding probabilities or outcomes.”); Kahneman, *Maps*, *supra* note 30, at 1454 (“Doubt is a phenomenon of [reasoning], an awareness of one’s ability to think incompatible thoughts about the same thing . . . [but] experienced decision makers working under pressure . . . rarely need to choose between options because, in most cases, only a single option comes to mind.”).

⁶² Kahneman, *Maps*, *supra* note 30, at 1457 (“The cultural norm of reasonable decision-making favors the long-term view over a concern with transient emotions. . . . On the other hand, an exclusive concern with the long term may be prescriptively sterile, because the long term is not where life is lived.”).

⁶³ Kahneman, *Maps*, *supra* note 30, at 1463 (“The prototype of a set is characterized by the average values of the salient properties of its members.”). The representation of objects by their prototypes in making decisions, the use of co-called prototype heuristics, is a “remarkably consistent pattern of [cognitive] bias[.]” *Id.* at 1463. Yet it also “serves an important adaptive function. It allows new stimuli to be categorized efficiently, by comparing their features to those of category prototypes.” *Id.*

⁶⁴ Extensional variables are changes in an item that do not alter its basic character or value. Kahneman gives the following example. Imagine a disease is about to break out and it will kill six hundred people. Two programs have been proposed to combat it. Program A will save two hundred people for certain. Program B will provide a one-third probability that six hundred people will be saved and a two-thirds probability that six hundred people will die. Program B is an extensional variation of program A. Kahneman, *Maps*, *supra* note 30, at 1458. See also *id.* at 1467 (in evaluating the utility of an experience that extends over time there is a “profound incompatibility between the . . . logic of belief and choice [which] requires accurate evaluation of extensional variables. . . [and] intuitive thinking [which] operates with exemplars or prototypes that have the dimensionality of individual instances and lack the dimension of extension.”) See also Kenneth J. Arrow, *Risk Perception in Psychology and Econometrics*, 20 ECON. INQUIRY 1 (1982) (describing the “inconsequential variation in outcome” as the property of “extensionality”).

⁶⁵ Kahneman, *Maps*, *supra* note 30, at 1466-68.

⁶⁶ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1124 (“[P]eople rely on a limited number of heuristic principles which reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations.”). This is achieved by a process of attribute substitution. “An individual assesses a specified *target attribute* of a judgment object by substituting another property of that object—the *heuristic attribute*—which comes more readily to mind.” Kahneman & Frederick, *Representativeness Revisited*, *supra* note 36, at 53. Kahneman and Tversky give the example of resolving a question of probability by asking whether a relevant incident comes easily to mind rather than investigating statistical evidence. Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 5 COGNITIVE PSYCHOL. 207 (1973).

things even when the stakes are high.⁶⁷ Though intuiting resembles perception more than reasoning,⁶⁸ it works in tandem with reasoning to form what Kahneman and Tversky called a “compound cognitive system,”⁶⁹ one that corrects internally for its own deficiencies⁷⁰ and provides a two-part mechanism for adjusting to change, both “a short-term process that is flexible and effortful, and a long-term process of skill acquisition that eventually produces highly effective responses at low cost.”⁷¹ For most people, intuiting is the cognitive process underlying judgment most of the time, particularly for decisions made within a limited time frame, under deadline pressure, and without access to all of the necessary information.

It is understandable that legal bargaining scholars would be attracted to Prospect Theory. Even the simplest negotiation requires rapid-fire judgments based on incomplete data and partial understandings, made under circumstances that do not permit more extensive investigation or sophisticated analysis.⁷² Bargainers must determine how to counter arguments they did not anticipate, respond to offers whose implications are not clear, evaluate factual claims for which supporting evidence is incomplete, make proposals without knowing how they will be received, and probe for information others do not want to reveal, all instantly and automatically as the opportunities present themselves in the bargaining conversation, without losing their place or direction in an overall strategic plan. Each of these tasks calls for judgments—about the situation, the case, other bargainers, the parties, extra-bargaining alternatives, and the like—that must be made quickly or not at all. Prospect Theory describes the cognitive processes through which these kinds of judgments are most naturally made. In a sense, Prospect Theory is a template for ordinary bargaining judgment and thus a natural subject of study for those who would understand bargaining and its effective performance. How much guidance one should take from the theory is the question to which we now turn.

III. Prospect Theory’s Relationship to Legal Bargaining

Prospect Theory generally⁷³ has been criticized on a wide variety of grounds, both from within the field of psychology and without, but my focus will be narrower. I am

⁶⁷ Kahneman, *Maps*, *supra* note 30, at 1468 (“[T]he claim that high stakes eliminate departures from rationality is not supported by a careful review of the experimental evidence.”)

⁶⁸ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1124 (“The subjective assessment of probability resembles the subjective assessment of physical quantities such as distance or size.”).

⁶⁹ Kahneman, *Maps*, *supra* note 30, at 1454.

⁷⁰ Kahneman, *Maps*, *supra* note 30, at 1451 (“System 2 monitors the activities of System 1”).

⁷¹ *Id.* at 1454.

⁷² Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 798 (describing how negotiators need to rely on heuristics to make “fast and frugal” judgments because they “cannot know the objective values and probabilities of every option they might consider before reaching a negotiated outcome”) (quoting Jean Czerlinski et al., *How Good Are Simple Heuristics?*, in *SIMPLE HEURISTICS*, *supra* note 45, at 97, 97); Jeffrey J. Rachlinski, *Gains, Losses, and the Psychology of Litigation*, in *WIGGINS & LOWRY*, *supra* note 26, at 290, 296 (arguing that an understanding of Prospect Theory will provide a bargainer with leverage over an adversary).

⁷³ This is true for Behavioral Decision Theory as well. I will treat Prospect Theory and Behavioral Decision Theory as interchangeable terms for purposes of this section of the discussion. Criticisms of the latter usually will apply to Prospect Theory with equal force.

interested only in the question of what the theory can contribute to an understanding of legal bargaining and will limit my discussion to uses made of the theory by legal bargaining scholars to support prescriptive claims about bargaining effectiveness. Questions about the theory's implications for restructuring substantive law rules, legal institutions, rules of evidence and procedure, and the like, even those that define and regulate the institutions and conditions of legal bargaining, are for another day. In the sections that follow I will describe how the methods and concepts of Prospect Theory research do not map perfectly onto the practice of legal bargaining. While many bargaining decisions are made intuitively, in the fashion described by Prospect Theory, structural features of the bargaining process often require bargainers to move beyond intuiting into reasoning if they are to perform effectively. This, in turn, makes legal bargaining a hybrid process, made up of both types of cognitive functioning identified by Kahneman and Tversky, and thus not completely amenable to Prospect Theory-based analysis.⁷⁴

1) Prospect Theory Research Is About Decision Making More Than Bargaining

For the most part, Prospect Theory research is based on responses to hypothetical⁷⁵ decision scenarios asking questions about valuation and prediction, and these decision scenarios do not reproduce the experience of real life bargaining fully.⁷⁶

⁷⁴ Criticisms discussed in this section are variations of the so-called ecological validity criticism. See Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1985-92 (criticizing Behavioral Decision Theory experiments for not presenting problems in "ecologically valid" formats); Prentice, *Chicago Man*, *supra* note 22, at 1697-98 ("After psychologists perform laboratory studies and derive results, they are often then able to produce hypotheses testable in the real world. Questions of ecological validity are on the minds of every psychologist who structures an experiment, and studies that lack it are often attacked. Therefore, psychologists have tested their hypotheses over and over both in the laboratory and in the field.") (citations omitted). Ecological validity is not an across the board problem for all types of behavioral decision theory experimentation. Some legal processes—jury decision making is a good example—are more easily simulated in a laboratory than others, see Prentice, *Chicago Man*, *supra* note 22, at 1698 ("[M]ock jury research has improved so that there is little or not difference between the results of studies of mock jurors in university laboratories and the results of studies of real jurors in actual courtrooms."), though more recent jury research has recognized the importance of real life context to the validity of such experiments. See, e.g., Max Minzner, *Detecting Lies Using Demeanor, Bias, and Context*, 29 *CARDOZO L. REV.* 2557, 2567 (2008) (describing "[m]ore recent studies" finding that an observer's ability to detect lying improves when he has access to the real life context surrounding a witness's testimony). See also Gretchen B. Chapman & Brian H. Bornstein, *The More You Ask for, the More You Get: Anchoring in Personal Injury Verdicts*, 10 *APPLIED COGNITIVE PSYCHOL.* 519, 536 (1996) ("It is difficult to know the extent to which the results of [jury] simulations can be applied to court-room situations.").

⁷⁵ Subjects sometimes behave differently in situations with hypothetical consequences than in situations in which the consequences are real. See Mitchell, *Why Law and Economics*, *supra* note 30, at 114-19 (summarizing the literature on "incentive effects" in behavioral decision research).

⁷⁶ Cf. Mitchell, *Why Law and Economics*, *supra* note 30, at 109 (describing how "behavioral patterns that appear irrational from an asocial, narrow perspective focused on procedural rationality may appear quite rational from a contextualized, instrumental perspective"); Korobkin, *Aspirations*, *supra* note 34, at 20-21 (describing the types of experiments designed to test aspiration levels and concluding that "[i]t is not obvious . . . that these findings would translate to the context of bargaining generally or settlement behavior specifically").

While the scenarios often are described as bargaining problems,⁷⁷ rarely if ever are subjects⁷⁸ given the opportunity to interact personally with another side to compare and discuss alternative resolutions to the problems.⁷⁹ No opportunity is provided to identify and clarify points of disagreement, argue for preferences, adjust expectations based on the other side's objections,⁸⁰ break off discussion to evaluate options, change features of the problem to increase one's leverage,⁸¹ seek out other partners with whom to deal,⁸² or try in any other way try to change situational incentives or constraints defined by the problems so as to increase their chances of succeeding.⁸³ To the extent that the subjects in these experiments make bargaining moves at all, they make them privately, imaginatively, and unilaterally (all of which is to say, superficially and self-servingly), in

⁷⁷ See Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2029 (description of the "Case Settlement Evaluation" scenario).

⁷⁸ Psychologists prefer a more personal term, such as participant, respondent, or individual, to the term "subject," perhaps to avoid the submissive connotation attached to the latter. See AMERICAN PSYCHOLOGICAL ASS'N, PUBLICATION MANUAL OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION 65 (5th ed. 2001) ("Replace the impersonal term subjects with a more descriptive term when possible – participants, individuals, college students, children, or respondents, for example"). Following Mitchell, I will use the term *subject* since it is likely to be more familiar to a legal audience. See Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1945 n.69.

⁷⁹ For a representative example of such a problem, in which subjects were required to assume what ordinarily would be argued about, see Linda Babcock et al., *Forming Beliefs About Adjudicated Outcomes: Perceptions of Risk and Reservation Values*, 15 INT'L REV. L. & ECON. 289, 292 (1995) (subjects asked to predict what a jury would award, the minimum amount a client should accept, and the maximum amount a client should pay, in a products liability lawsuit in which the definition of comparable awards in the jurisdiction was fixed by the researchers and not subject to discussion). This is understandable since Prospect Theory experiments are designed to study decision making, not bargaining. Some legal scholars have conducted experiments of their own using quasi-bargaining problems, but these problems also lack most of the properties of real-life bargaining described in the text. See, e.g., Orr & Guthrie, *Anchoring*, *supra* note 34, at 609-11.

⁸⁰ See Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1977 ("One of the clearest ways in which many behavioral decision experiments differ from many decision settings in the real world is in the lack of feedback or learning opportunities provided to subjects. . . . [which] increases the likelihood that irrational responses will be found . . ."). See also William P. Bottom & Paul W. Paese, *Judgment Accuracy and the Asymmetric Cost of Errors in Distributive Bargaining*, 8 GROUP DECISION & NEGOT. 349, 356-57 (1999) (discussing studies showing how "subjects alter[] their expectations a great deal from the beginning of the negotiation to the end").

⁸¹ Perhaps the best example of how social science research on bargaining fixes the conditions under which subjects must operate is the "Rubinstein bargaining game," a two-person game designed to test mathematical models of settlement under the assumption of perfect information and the requirement of alternating offers. See DOUGLAS G. BAIRD ET AL., GAME THEORY AND THE LAW 221-28 (1994) (citing Ariel Rubinstein, *Perfect Equilibrium in a Bargaining Model*, 50 ECONOMETRICA 97 (1982)).

⁸² Subjects are not permitted to manipulate their BATNA, in Fisher and Ury's now-famous terminology. ROGER FISHER, WILLIAM URY, & BRUCE PATTON, GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN 97-106 (2d ed. 1991) (defining BATNA, or best alternative to a negotiated agreement).

⁸³ Some studies attempt to overcome this difficulty by including a faux opponent in the experiment. The opponent's behavior is controlled by the researcher's instructions, however, not the opponent's own autonomous choices. Whether the opponent is cooperative or competitive, aggressive or friendly, communicative or silent, is based on researcher dictates and not the opponent's own decisions based on data available in the situation. Such experiments are marginally more sophisticated than the "narrative scenario" ones described above, but their highly controlled and rigid nature deprives them of the verisimilitude needed to make the experience realistic.

their heads, effectively insulated from any objections or counter-proposals, as if in a thought experiment rather than a negotiation.⁸⁴

Some Prospect Theory experiments study bargaining directly but they usually are based on reductionist and unrealistic models of the bargaining process. These experiments disaggregate bargaining to study its components in isolation, rather than as packages of complementary processes working together as units.⁸⁵ Typically, subjects are given uncontested and incomplete information about key factors in their problems (e.g., that the adverse bargainer is an aggressive, hard-line, maximizer),⁸⁶ rather than permitted to form their own conclusions about those factors based on data from the situation, or to shape the situations so that the factors play a less (or more) important role than the researchers intended. Information about bargainer interests and values is kept static rather than adjusted to take account of changing circumstances and beliefs. Little or no opportunity is given to change an adversary's state of mind⁸⁷ about what efficiency, common sense, or fairness requires, or to make out-of-the-ordinary proposals that could

⁸⁴ Realistic scenarios may be more important to the study of bargaining than to the study of decision making in general. Much of what a bargainer knows and takes into account in deciding how to proceed—factual information about the case, alternatives to settlement, practical considerations in choosing one option over another, the strength of the parties' underlying legal claims, the intensity of an adversary's resistance, the sincerity of his commitment, and the like—depends, at least in part and often exclusively, on information introduced by the adversary. Bargainers will not understand the scope, sophistication, or intensity of the other side's views if they have to invent and defend those views for themselves, and they will not bargain in a representative manner if they do not understand the other side's views. This is not a problem in real life bargaining, of course, since adversaries force their views on one without being asked.

⁸⁵ *But see* Prentice, *Chicago Man*, *supra* note 22, at 1696-97 (while psychology experiments are "inherently artificial in the sense that causal variables are isolated from their normal contextual variation", they still have the qualities that permit generalizing to the "complex real world") (quoting Marilyn B. Brewer, *Research Design and Issues of Validity*, in *HANDBOOK OF RESEARCH METHODS IN SOCIAL AND PERSONALITY PSYCHOLOGY* 14-15 (Harry T. Reis & Charles M. Judd eds., 2000)). The attractiveness of studying bargaining piecemeal is easy to understand. If variables are defined narrowly enough, social science research can be extended almost indefinitely, making incremental additions to the theory in the manner of Vasily Alexeyev adding to world weight-lifting records. Alexeyev, probably the greatest heavyweight lifter of all time, was rewarded by the former Soviet Union for each world record he set, so rather than lift as much as he could in any one competition, he lifted only a few pounds more than his previous record, breaking the record but also leaving himself room to break it again the next time he competed. The Soviet government did not seem to mind. Each new record warranted a new press release trumpeting the superiority of the Soviet system. *See* L. Cavanaugh, *Red Sport Supremacy May Fall with the Wall*, *COURIER-MAIL* (Australia), Nov. 13, 1989 ("Alexeyev . . . was paid 1000 roubles each time he broke a world record. He broke more than 80 world records in his career."); Skip Myslenski & Linday Kay, Sports, *CHICAGO TRIB.*, July 10, 1986, at 2 ("[Alexeyev] used to raise his own records by only a pound or two and would readily admit he did it that way because he received a bonus each time he set another mark").

⁸⁶ *See* Alex Stein, *A Liberal Challenge to Behavioral Economics: The Case of Probability*, 2 *N.Y.U. J.L. & LIBERTY* 531, 535 (2007) (subjects not told whether court considered percentage of blue cabs in city when reporting witness's reliability at identifying blue cabs); Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2029 (subjects told that the accident was caused solely by the negligent driving of one of the parties).

⁸⁷ It is reasonable for a bargainer to expect that he will be able to change an adversary's state of mind. *See* Bottom & Paese, *Judgment Accuracy*, *supra* note 80, at 356-57 (discussing studies showing that confident and optimistic bargainers are able to alter adversary expectations in negotiation).

lead to non-standard outcomes.⁸⁸ Many of the dimensions of bargaining most susceptible to the influence of skill,⁸⁹ in other words, are excluded from Prospect Theory experimentation. By denying subjects the opportunity to exercise it, in fact, Prospect Theory research seems to assume that skill has little or no role to play in the bargaining process.⁹⁰

Face-to-face conversation with an adversary, which forces one to evaluate options from more than a self-interested point of view, is a defining feature of real-life dispute bargaining.⁹¹ By challenging one's demands, or the premises on which they are based, an adversary serves as a reminder that not all interests are the same, not all arguments are compelling, and not all value systems are identical. If agreement is to be reached, bargainers must look beyond self-interested first impressions to find principled positions that are acceptable to all sides, or middle ground positions which accommodate everyone's interests fairly. There is no check of this sort built into Prospect Theory experimentation; no process, actor, or structural feature that performs the testing function of adversary rebuttal.⁹² As a consequence, Prospect Theory subjects are free to adopt attitudes and make moves based on superficial, selfish, and ill-thought-out positions that would not work in real life bargaining because they could not be defended from attack. Prospect Theory experiments may or may not reproduce the conditions of decision-making generally—that is for others to say—but they do not capture the essential

⁸⁸ See Oldfather, *Heuristics, Biases*, *supra* note 35, at 259-60 (“A defendant faced with a plea deal is likely to consult with family, friends, and fellow inmates before making his decision. In contrast to the sorts of well-defined, individual decisions made under fixed time constraints on which the behavioral economics literature is largely based, plea bargains present complex decisions typically made over a relatively lengthy time span after consultation with a potentially large group of people. Each one of these distinctions presents a possible roadblock to the easy application of heuristics and biases research to plea bargaining.”) (citation omitted).

⁸⁹ See Robert J. Condlin, *Bargaining With a Hugger: The Weaknesses and Limitations of a Communitarian Conception of Legal Dispute Bargaining, or Why We Can't All Just Get Along*, 9 CARDOZO J. CONFLICT RESOL. 1, 16-69 (2007) (describing lawyers modifying adverse bargainer beliefs and other seemingly fixed features of negotiation through skill maneuvers).

⁹⁰ Assumptions of this sort make Prospect Theory's analysis circular, building its pre(mis)conceptions tacitly into its premises and then scrupulously proving the same. This is a strange quality in a research program touted for its greater descriptive accuracy.

⁹¹ People reason when the need to reason is called to their attention, Kahneman, *Maps*, *supra* note 30, at 1468 (“the activation of [reasoning] depends on the factors of attention and accessibility”), and an adversary does that. In a sense, an adversary is a structural instantiation of the de-biasing strategy of “consider the opposite.” See note 198 and accompanying text. Adversarial testing also may make legal bargaining more like a joint (rather than separate) evaluation of options, and joint evaluation eliminates certain errors of intuition. See John A. List, *Preference Reversals of a Different Kind: The “More Is Less” Phenomenon*, 92 AM. ECON. REV. 1636 (2002) (violations of monotonicity eliminated when traders are able to evaluate and bid on different items at the same time rather than separately) (cited in Kahneman, *Maps*, *supra* note 30, at 1465); Mitchell, *Why Law and Economics*, *supra* note 30, at 165 (“Decisions made in the absence of feedback and opportunities for learning often differ from decisions made in settings that allow for feedback and learning.”). *But see* Prentice, *Chicago Man*, *supra* note 22, at 1702 (“in the real world people often have to deal with problems presented as probabilities”), and 1733-34 (“as people go through life they will often be faced with problems framed as probabilities.”).

⁹² See, e.g., Korobkin, *Aspirations*, *supra* note 34, at 20 (“Most of the copious amounts of empirical evidence on the effects of goals on performance . . . are collected in noncompetitive settings.”).

adversarial quality of legal dispute bargaining that prevents heuristics and biases from operating unchecked.⁹³

The absence of genuine adversarial testing also permits subjects in survey research on bargaining to give romanticized and highly self-serving, but sincere, descriptions of how they bargain.⁹⁴ The subjects will have a sense of the “correct” response⁹⁵ to any given scenario taken largely from consensus norms of how rational people would act under the circumstances and, without anyone to disagree, are free to assume that their thoughts act as mothers to their deeds.⁹⁶ They would have to think themselves incompetent to assume otherwise. It would be a mistake to indulge them in this assumption, however, or to take their descriptions at face value. For the most part, Prospect Theory subjects are not trained empiricists; they do not have any particular skill at examining behavior systematically,⁹⁷ on the basis of direct data,⁹⁸ with an

⁹³ Professor Lubet describes how the adversary system builds various “correctives” into lawyer interactions that reduce, even if they do not eliminate, the impact of cognitive errors. See Steven Lubet, *How Lawyers (Ought To) Think* (2007) (manuscript at 5-6), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1002998 (“Even when a lawyer plays fast and loose, with either facts or inferences, opposing counsel is there to point out the missing evidence or logical flaws. For every attorney who tries to take advantage of cognition errors, another is ready to rectify false impressions and caution against mistaken conclusions. Because every argument is subject to rebuttal, the adversary system itself minimizes opportunities to exploit fallacies and heuristics.”).

⁹⁴ See, e.g., WILLIAMS, *supra* note 16, at 137-39; Kupfer-Schneider, *Shattering Negotiation Myths*, *supra* note 25, at 147-48. People often overestimate their ability to perform effectively, particularly when using ambiguous and self-generated criteria of effectiveness. See David Dunning, Judith A. Meyerowitz, & Amy D. Holzberg, *Ambiguity and Self-Evaluation: The Role of Idiosyncratic Trait Definitions in Self-Serving Assessments of Ability*, in HEURISTICS AND BIASES, *supra* note 36, at 324, 325-33. The tendency may be magnified when evaluating bargaining skill. Most individuals describe themselves as good bargainers even when their actual performances fall short of their expectations. LEIGH L. THOMPSON, *THE MIND AND HEART OF THE NEGOTIATOR* 5 (3d. ed. 2005). Even professionals who negotiate for a living fall prey to this overconfidence, both overestimating their ability to adhere to strategies and underestimating the probability that something will go wrong. *Id.* at 5, 27, 193.

⁹⁵ They might think, for example, that they should never display weakness or lack of conviction in the face of aggression and assume that they always behave in that way, ignoring experiences or personal character traits that might make such an assumption implausible.

⁹⁶ In Prospect Theory parlance, they are free to indulge in a confirmatory bias. See Gretchen B. Chapman & Eric J. Johnson, *Incorporating the Irrelevant: Anchors in Judgments of Belief and Value*, in HEURISTICS AND BIASES, *supra* note 36, at 120, 133 (describing the tendency to seek information that is consistent with the current hypothesis and “to interpret evidence as consistent with the hypothesis” as the “confirmation bias”); Derek J. Koehler, Lyle Brenner, & Dale Griffin, *The Calibration of Expert Judgment: Heuristics and Biases Beyond the Laboratory*, in HEURISTICS AND BIASES, *supra* note 36, at 686, 692 (“according to the confirmatory bias model . . . [there is] a general tendency . . . to recruit reasons from memory that confirm the focal hypothesis”) (citation omitted). The overconfidence bias, see Dale Griffin & Amos Tversky, *The Weighing of Evidence and the Determinants of Confidence*, in note 36, at 230, 230-39 (describing the “determinants of confidence”), and availability heuristic, see Tversky & Kahneman, *Judgment*, *supra* note 46, at 1127-28, also help explain such reports. *But see* Mitchell, *supra* note 53, at 18-19 (“Although individuals often fail to identify accurately all of the influences on their judgments and decisions, and thus fail to be conscious of biasing influences on their judgments and decisions, they may nonetheless engage in deliberations due to the nature of the task confronted without any extra situational prompting or special internal predispositions to do so.”)

⁹⁷ *But see* Amos Tversky & Daniel L. Kahneman, *Belief in the Law of Small Numbers*, 76 PSYCHOL. BULL. 105 (1971) (study in which subjects were “experienced research psychologists”).

understanding of how intentions and expectations do not always shape behavior.⁹⁹ To learn how they truly bargain one would have to observe them doing it—arguing, trading, threatening, brainstorming, compromising, agreeing and the like—under real life conditions and with real life stakes, where they would fall back on the skills and habits internalized in past bargaining experiences and social relationships generally. Events would move too quickly for them to do anything else.

Given these important differences between Prospect Theory experiments and real life bargaining, the claim of some legal bargaining theorists—that lawyer bargainers often are susceptible to the influence of irrational heuristics and biases—seems premature, if not circular.¹⁰⁰ If Prospect Theory data shows that bargainers reason irrationally, and it is not yet clear that it does,¹⁰¹ it might be because Prospect Theory experiments do not include the principal mechanism built into real-life bargaining to correct for irrationality, that of another bargainer arguing the opposite side.¹⁰² In a sense, absolving subjects from the need to justify their demands and explain their positions almost invites them to be irrational, or at least to act as if they were in unilateral control of the situation and under no obligation to consider opposite viewpoints or explore alternative approaches.¹⁰³ In the end, real life bargaining and Prospect Theory

⁹⁸ CHRIS ARGYRIS & DONALD A. SCHÖN, *THEORY IN PRACTICE: INCREASING PROFESSIONAL EFFECTIVENESS* 38-40 (1974).

⁹⁹ ARGYRIS & SCHÖN, *THEORY IN PRACTICE*, *supra* note 98, at 6-7 (defining theories in action), and 174-80 (describing “incongruities between espoused theories and theories-in-use”).

¹⁰⁰ *Cf.* Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1946 (describing behavioral decision theory as producing “a mythology of decision making as rampantly and fundamentally flawed . . . through the repeated use of standard research paradigms that are designed to show biased behavior and through the use of statistical methodology that stacks the deck in favor of finding biased behavior without concern for the practical importance of the behavior outside of the laboratory and, perhaps most surprisingly, *largely without documenting that any particular individuals actually acted irrationally in the experiments.*”).

¹⁰¹ Tversky and Kahneman seem to think that such judgments are departures from rationality. *See* Tversky & Kahneman, *Judgment*, *supra* note 46, at 1124 (describing the heuristics as “quite useful, but sometimes they lead to severe and systematic errors”); Kahneman, *Maps*, *supra* note 30, at 1469 (the problem “is not that they reason poorly but that they often act intuitively . . . [their] behavior . . . is not guided by what they are able to compute, but by what they happen to see at a given moment”); KEITH E. STANOVICH, *WHO IS RATIONAL? STUDIES OF INDIVIDUAL DIFFERENCES IN REASONING* 252 (1999) (reviewing the most important heuristics and biases experiments and concluding that “[i]t does seem that some human behavior is systematically irrational.”). *But see* Gerd Gigerenzer & Daniel G. Goldstein, *Betting on One Good Reason: To Take the Best Heuristic*, in *SIMPLE HEURISTICS*, *supra* note 45, at 75, 75-95 (analyzing the judgment heuristic of “Take the Best”).

¹⁰² Think of this as a structural “outside strategy.” Trout, *Paternalism*, *supra* note 46, at 420-21 (describing outside strategies). *See also* Mitchell, *supra* note 53, at 12 (“conscious awareness of bias is not a necessary precondition to self-correction.”). An adverse bargainer can be thought of as a kind of “accountability mechanism” in Mitchell’s felicitous term. *Id.*, at 39 (“erecting accountability mechanisms that encourage metacognitive reflection and possibly doubt about the neutrality or legality of one’s decisions may debias judgments in legally sensitive or risky situations . . .”).

¹⁰³ Mitchell, *supra* note 53, at 14 (“Bias avoidance occurs also because some situations prompt debiasing deliberative thought across a wide range of people, such as the self-critical reflection prompted by knowledge that one’s judgments and decisions must be explained to an audience with unknown views.”)

experimentation are different in kind—one is dialogue and the other monologue¹⁰⁴ – and this is a reason to be cautious about extrapolating from one to the other. It would be ironic if research noted for its criticism of the empirical foundations of expected utility analysis ended up being used in an empirically questionable manner itself, but then irony is common in modern life, so much so that it almost has become obsolete.¹⁰⁵

2) Prospect Theory Data is About Students and Not Lawyers

Prospect Theory research does not study lawyer bargainers directly. Studying lawyers would be expensive, time-consuming and cumbersome. Legal bargaining does not follow easily manipulated timetables, lend itself to having variables controlled or background facts held constant, and lawyers do not work for pennies, pastries, or vouchers to fast food restaurants.¹⁰⁶ Even if these and other such practical difficulties could be overcome, lawyers and clients are not likely to consent to being studied—the former to protect their strategies and the latter their privacy—and such study could not proceed without their consent.¹⁰⁷ For these reasons, and also because it is interested in decision making generally, not lawyer bargaining decision making in particular, Prospect Theory research is based for the most part on college student resolutions of decision problems presented in hypothetical factual scenarios and distributed (usually) at the beginning of psychology class.¹⁰⁸

¹⁰⁴ Professor Korobkin describes a representative experiment investigating “how lawyers and law students think about issues that arise in negotiation concerning lawsuits and potential lawsuits.” Korobkin, *Aspirations*, *supra* note 34, at 36-37.

¹⁰⁵ One is reminded of Tom Lehrer’s allegedly apocryphal reaction to the news that Henry Kissinger had been awarded the Nobel Peace Prize: that “satire was now obsolete.” See Interview with Tom Lehrer, THE ONION, May 24, 2000, <http://www.avclub.com/content/node/22863> (“I don’t know how that got started. . . . For one thing, I quit [doing satire] long before that happened, so historically it doesn’t make any sense. I’ve heard that quoted back to me, but I’ve also heard it quoted that I was dead, so there you are. You can’t believe anything you read.”).

¹⁰⁶ I come back to this topic at the end of the article when I discuss the characteristics of future research on legal bargaining. See *infra* notes 233-238 and accompanying text. There, I suggest that anthropological studies, such as those in books like *A Civil Action*, Peter Schuck’s *Agent Orange on Trial*, and the like, provide the best examples of real life negotiation data. That such books are in short supply gives one a sense of how difficult the data is to collect.

¹⁰⁷ Laboratory experiments that attempt to study lawyers bargaining directly would have their own distinctive problems to overcome. It is almost impossible in a laboratory, for example, to reproduce the complex personal and institutional relationships between bargainers that are a hallmark of real life negotiation, or to permit bargainers to invent their own individually crafted outcomes, delay settlements until circumstances become more favorable, or change circumstances to make them more favorable. Yet, these and other such features of real life bargaining often are the major factors in determining why and for what parties settle.

¹⁰⁸ Prentice, *Chicago Man*, *supra* note 22, at 1713 n.264. See also Korobkin, *Aspirations*, *supra* note 34, at 36-37 (describing an experiment in which law students in Business Association and Negotiation courses were asked questions during the first week of class about how they would act in hypothetical bargaining decision scenarios); Mitchell, *Why Law and Economics*, *supra* note 30, at 156 (“college-age adults . . . serve as the subjects of the vast majority of behavioral decision theory research”); JONATHAN BARON, THINKING AND DECIDING 49 (4th ed. 2008) (“Psychologists often use what others call (somewhat derisively) ‘convenience samples,’ such as students enrolled in an introductory psychology course.”). In addition to college students, Prospect Theory experiments have involved research psychologists and statisticians, see Tversky & Kahneman, *Judgment*, *supra* note 46, at 1125, 1130, as well as graduate students, business executive, doctors, realtors, auditors, financial traders, and federal judges. See Prentice,

This data might be an appropriate basis for the study of decision making in general,¹⁰⁹ but students solving stylized, academic, low-stakes, strategy puzzles, usually for the first time,¹¹⁰ are engaged in an altogether different enterprise from that of lawyers settling real life disputes. Lawyers usually are experienced at bargaining, for one thing, and experienced actors generally are less susceptible than novices to heuristics and biases of imperfect rationality.¹¹¹ Prospect Theory research itself establishes that.¹¹² Student

Chicago Man, *supra* note 22, at 1727-29 (listing the various types of subject populations used in Behavioral Decision Theory research); Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 1021-22 (same); Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, *Inside the Judicial Mind*, 86 CORNELL L. REV. 777 (2001) (describing a study in which judges were subjects). The use of student subjects could be an instance of Prospect Theory research falling victim to its own form of an “availability bias.” See David O. Sears, *College Sophomores in the Laboratory: Influences of a Narrow Data Base on Social Psychology’s View of Human Nature*, 51 J. PERSONALITY & SOC. PSYCHOL. 515 (1986) (describing the limitations of student subject populations); Reginald Smart, *Subject Selection Bias in Psychological Research*, in THE SCIENCE OF PSYCHOLOGY: CRITICAL REFLECTIONS 155-61 (Duane P. Schultz ed., 1970) (same).

¹⁰⁹ But see Mitchell, *Why Law and Economics*, *supra* note 30, at 139-60 (describing the range of individual differences in subject populations that must be taken into account in developing a general theory of legal decision making).

¹¹⁰ Prentice, *Chicago Man*, *supra* note 22, at 1698 (suggesting that students who have not previously participated in social science research projects make the best subjects). Professor Prentice explains why “psychologists in the heuristics and biases school tend to study one-shot decisions [whereas] experimental economists tend to create markets and allow subjects to play repeatedly . . .” *Id.* at 1703-04.

¹¹¹ Kahneman, *Maps*, *supra* note 30, at 1453 (“through experience . . . [t]he acquisition of skill gradually increases the accessibility of useful responses and of productive ways to organize information, until skilled performance becomes almost effortless.”); COMMITTEE ON DEVELOPMENTS IN THE SCIENCE OF LEARNING, HOW PEOPLE LEARN: BRAIN, MIND, EXPERIENCE, AND SCHOOL 31 (John D. Bransford et al. eds., 2000) (“Experts notice features and meaningful patterns of information that are not noticed by novices.”); Babcock et al., *supra* note 79, at 294-95, 300-01 (describing how student and lawyer subjects make different predictions about adjudicated outcome and estimates of client reservation prices because of their different experiences with lawyer role); Russell Korobkin & Chris Guthrie, *Psychology, Economics, and Settlement: A New Look at the Role of the Lawyer*, 76 TEX. L. REV. 77, 100 (1997) (finding that attorney subjects preferred certain settlement over the option of risky litigation with a lower expected value). Some Prospect Theory experiments are based on highly unusual and emotionally charged events with which most adults, let alone students, would have little direct experience, and in which they would want to consult with family and friends before deciding how to respond. See, e.g., Chapman & Bornstein, *The More You Ask for*, *supra* note 74, at 523-24 (describing an anchoring experiment involving a personal injury lawsuit “in which . . . a young married woman named Kathy, sued her health-maintenance organization . . . , claiming that the birth control pill they [sic] prescribed caused her to develop ovarian cancer.”). To assume that an instantaneous student resolution to such a problem, arrived at after reading a “one-page description” of the events, *id.* at 523, is the equivalent of a fully considered adult responses, both intellectually and emotionally, seems optimistic at best.

¹¹² John A. List, *Does Market Experience Eliminate Market Anomalies?*, 118 Q.J. ECON. 41 (2003) (describing how experienced traders are less reluctant to exchange one set of goods for another because they have learned to base their decisions on long term value rather than the immediate emotions associated with getting or giving up objects); Weinstein, *supra* note 28, at 820 (describing how lawyers and judges are less sensitive to framing biases because they “have learned to think about and analyze expected value. . . . Their repeated exposure to problems of this sort . . . helps them develop the habit of analyzing these problems in economic terms”); Korobkin & Guthrie, *Psychology*, *supra* note 111, at 99-101 (suggesting that lawyers are less susceptible than non-lawyers to framing effects in settling a hypothetical personal injury claim); Rachlinski, *The New Law and Psychology*, *supra* note 24, at 757 (describing how “novices in a field or one-shot players are unlikely to have had enough experience to have received adequate feedback” about their cognitive biases to avoid errors in judgment.); Guthrie & Rachlinski, *Insurers*, *supra* note 37, at

subjects usually have limited experience with social science research problems, on the other hand, and are often screened for just that quality.¹¹³ Also unlike students, lawyers have internalized the habits, conventions, and values of professional practice, both those of particular professional communities in which they work and the legal profession in general.¹¹⁴ They understand the idea of fiduciary obligation and the corollary duty to defer to client choices even when different from their own. They make decisions as agents not principals,¹¹⁵ define objectives and construct strategies from the perspective of client interests rather than their own, and push aggressively for outcomes they would not pursue if it was up to them personally. They understand how correct results can be the work of systems rather than self-authorizing individuals, and how forcing adversaries to the limits of their authority often can be the best test of what their clients are entitled to receive.¹¹⁶ Students bring distinctively different values and beliefs to Prospect Theory experiments and behave like young adults, not lawyers. This makes their responses a questionable foundation on which to build a prescriptive theory of lawyer bargaining.

3) Prospect Theory Is About Form and Not Substance

2025 (describing how “insurance professionals demonstrated an impressive ability to resist the problems that heuristics can cause . . . [and] behave more like *homo economicus* than *homo psychologicus*”). Decision making in real life bargaining differs from student game playing in another significant respect. Lawyer bargaining decisions almost invariably are reviewed, both by other lawyers and clients, before they become final. These additional layers of review add experience, accountability, and perspective to the decision process and make it even less like a spontaneous and unmonitored, single-student reaction in a psychology class. See Jennifer S. Lerner & Philip E. Tetlock, *Accounting for the Effects of Accountability*, 125 PSYCHOL. BULL. 255 (1999); Mitchell, *Why Law and Economics*, *supra* note 30, at 110 (describing how “[a]ccountable and unaccountable decisionmakers often act differently”); Richard P. Larrick, James N. Morgan & Richard E. Nisbett, *Teaching the Use of Cost-Benefit Reasoning in Everyday Life*, 1 PSYCHOL. SCI. 362, 369 (1990) (“[A]lthough people ordinarily are not perfectly rational by economists’ standards, they are capable of becoming more rational.”). *But see* Prentice, *Chicago Man*, *supra* note 22, at 1746 (arguing that the issue of whether subjects in laboratory experiments are less accountable than real world actors is “unresolved”); *id.* at 1713 n.264 (“Even college students, who are more likely to be irresponsible in participating in such . . . experiment[s] . . . have generally been found to be ‘a fairly good proxy for real people.’”) (quoting Chris Guthrie, *Prospect Theory, Risk Preference, & the Law*, 97 NW. U. L. REV. 1115, 1156 (2003)).

¹¹³ The lack of experience is seen as a desirable trait in experimental subjects. See Prentice, *supra* note 22, at 1698.

¹¹⁴ See generally Geoffrey C. Hazard, Jr., *The Lawyer’s Obligation to be Trustworthy when Dealing with Opposing Parties*, 33 S.C. L. REV. 181, 193-94 (1981) (describing differences between big city and small town bargaining practices); Thomas F. Guernsey, *Truthfulness in Negotiation*, 17 U. RICH. L. REV. 99, 103-21 (1982) (listing bargaining conventions); Geoffrey M. Peters, *The Use of Lies in Negotiation*, 48 OHIO ST. L.J. 1, 7, 13 (1987) (describing the conventions of lawyer negotiators allowing intentional deception but prohibiting outright lies); MODEL RULES OF PROF’L CONDUCT R. 4.1 cmt. 2 (1983) (describing “generally accepted conventions in negotiation”); William H. Simon, *The Trouble With Legal Ethics*, 41 J. LEGAL EDUC. 65, 66-67 (1991) (“The law of negligence holds professionals to a ‘standard of care’ that represents a set of collectively defined but uncodified and partially unwritten general norms whose application to particular situations is assumed to require the reflective judgment of a qualified practitioner.”).

¹¹⁵ Mitchell, *Why Law and Economics*, *supra* note 30, at 161-64 (reporting studies that find that persons acting as agents do not always make decisions in the same way as persons acting as principals).

¹¹⁶ Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 525 (describing why “in many cases, negotiators do want to claim as much as possible”).

Prospect Theory's almost exclusive focus on the form decision making takes, rather than its underlying substantive reasons, makes the theory an awkward tool for studying a process that depends for its legitimacy on the assessment of competing substantive claims. Prospect Theory has no standards for sorting true arguments from false ones, fair resolutions from unfair ones, sociable behavior from unsociable behavior, efficient outcomes from inefficient ones, and the like. It simply is not a substantive theory of any kind.¹¹⁷ In this respect, it is the latest and most sophisticated example of a long line of procedural systems used by some legal bargaining theorists to minimize, if not eliminate, the role of substantive argument in the settlement of legal disputes.¹¹⁸

¹¹⁷ Matthew Adler discusses this point in considering whether Prospect Theory can combine with expected utility theory to provide a normative account of decision making by rationally bounded actors. Adler argues that Prospect Theory is "just orthogonal to that question. It tells the decisionmaker to transform outcomes into losses and gains from a reference point, and to transform the probabilities of states by an S-shaped function. How to characterize outcomes in the first place, . . . and which actions to consider, . . . are not parts of the theory." Adler, *Bounded Rationality*, *supra* note 36, manuscript at 15. Giving a general normative account of decision making by rationally bounded actors, Adler argues, is a "problem that no one has yet managed to solve." *Id.* But see Rachlinski, *The New Law and Psychology*, *supra* note 24, at 754 (arguing that Behavioral Decision Theory can combine with traditional legal norms (e.g., "treat like cases alike") to suggest normative positions and "the prescriptive norm [in Behavioral Decision Theory] is clear—eliminate error in judgment"). See also Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1939 ("The norms that serve as the criteria for rational behavior in behavioral decision theory emphasize the internal coherence and logical consistency of decisions and judgments."). Rachlinski acknowledges that judgment errors can have beneficial effects, and that when they do, [Behavioral Decision Theory] does not provide a clear normative position. The best that [it] can do . . . is to identify, and perhaps quantify, the costs and benefits of the cognitive processes. The question of whether to implement legal reforms that make people unhappy but lead them to make more efficient decisions must be answered in some other way.

Rachlinski, *The New Law and Psychology*, *supra* note 24, at 760. See also Jolls, Sunstein, & Thaler, *A Behavioral Approach*, *supra* note 43, at 1541 (describing the normative content of behavioral decision theory as "anti-antipaternalism").

¹¹⁸ See, e.g., Max H. Bazerman, *Negotiator Judgment: A Critical Look at the Rationality Assumption*, 27 AM. BEHAV. SCIENTIST 211, 220-25 (1983) (describing the process of influencing an adverse negotiator as consisting of trading proposals, framing issues, and making leveraging moves); Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, *passim* (same). Influencing a bargainer to change his "attitude towards a given idea or proposition," say Malhotra and Bazerman, typically entails "leveraging an understanding of psychological biases and heuristics [in order] to frame ideas and proposals in such a way that increases their appeal." *Id.* at 512. The authors' lack of interest in normative argument is probably explained by the fact that they write mostly about transactional bargaining and not dispute settlement. Korobkin and Guthrie, on the other hand, seem to view the use of heuristics and biases to manipulate adverse bargainers as interchangeable with normative argument.

In litigation bargaining, the settlement versus adjudication decision rests in large part on the negotiator's judgment of what a court would award the plaintiff should settlement negotiations fail. Because adjudication results are notoriously difficult to predict, the plaintiff's lawyer has a clear opportunity to improve his chances of convincing the defendant to choose settlement at a favorable price over adjudication (and vice versa for the defendant's lawyer) by manipulating the defendant's judgment of the adjudication option. Of course, the plaintiff's lawyer might accomplish this by persuasive argumentation. He might also accomplish this, however, by exposing the defendant to a high anchor—perhaps by making a very high initial settlement demand. Even if the defendant immediately rejects the high demand out of hand, the demand could anchor the defendant's prediction of a jury verdict, making that judgment higher than it otherwise

Many bargaining scholars believe that constructing individualized and ad hoc standards for resolving disputes is empowering, a way for parties to take responsibility for, and control over, their lives, and see the resort to external standards, including legal rules, as a kind of abdication of this responsibility.¹¹⁹ Unfortunately, because disagreements at the root of legal disputes are governed by law, most of the time it is not possible to resolve those disputes without evaluating the merits of the parties' competing legal claims. Prospect Theory may contribute to an understanding of this process at the margins, but it does not say anything about it directly, and attempts by legal commentators to make the necessary extrapolations have proved disappointing.¹²⁰

Even as a system of strategic maneuvering, Prospect Theory may not have much to offer legal bargaining. Two bargainers equally skilled at Prospect Theory techniques would be a sight to behold. Unlike their adversarial counterparts trying scrupulously to avoid making the first offer, "prospectors" would take the initiative, thrusting and parrying with enthusiasm and energy, in a sort of reverse Alphonse and Gaston, relentlessly neutralizing one another's efforts in a flurry of framing, anchoring, devaluing, salienting, and the like, all while standing substantively in place.¹²¹ The reason for this is simple enough. People are able to recognize and avoid the techniques and decision errors identified by Prospect Theory once they are alerted to them.¹²²

would be, and thus increasing the likelihood that the defendant would choose a somewhat lower settlement demand over the adjudication alternative.

Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 805-06.

¹¹⁹ See e.g., Carrie Menkel-Meadow, *Toward Another View of Legal Negotiation: The Structure of Problem Solving*, 31 U.C.L.A. L. REV. 754, 817 (1984) ("There is nothing in the problem-solving model [of negotiation] which necessarily compels parties to consider the justice of their solutions . . ."); and *id.* at 826 (When "the parties have widely divergent views . . . one of the primary advantages [of problem-solving negotiation] is that no judgment need be made about whose argument is right or wrong."); FISHER, URY, & PATTON, *supra* note 82, at 23 ("Ultimately, however, conflict lies not in objective reality but in people's heads. Truth is simply one more argument – perhaps a good one, perhaps not – for dealing with the difference").

¹²⁰ See Mitchell, *Why Law and Economics*, *supra* note 30, at 122-23 n.170 (arguing that certain legal decision theorists "engage in a fair amount of extrapolation from findings in nonlegal settings to the likely effects in legal settings. [Some of these theorists] acknowledge this practice and acknowledge that it is not ideal. The freedom in such extrapolations is of course great. Unfortunately, what seems to have happened so far is that the legal decision theorists have only included in their behavioral theorizing those empirical studies that support their views and have ignored and downplayed those studies that contradict their views.") (citations omitted).

¹²¹ Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 522-25 (describing "defense[s] against psychological influence tactics" based on Behavioral Decision Theory insights).

¹²² Alex Stein points out that Prospect Theory experiments fail to distinguish between cognitive performance and cognitive competence. Stein, *A Liberal Challenge*, *supra* note 86, at 536-37. The experiments establish that subjects err in their probability calculations (but only when judged against a narrow economic conception of rationality), and not that they are cognitively incompetent to make such calculations. *Id.* If people remain cognitively competent even when they err, they can learn to avoid error when properly alerted to it. "Admittedly," as Stein says, "people often fall into traps set by [Prospect Theory] experimenters in order to test their rationality. These traps, however, can only function as the conjurer's sleight of hand: each trick can be played only once. . . . [T]he play uncovers and thereby destroys the trick." *Id.* at 538. See also Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2022 ("Our data suggest that insurers might have developed cognitive skills that enable them to avoid many common errors in judgment that appear to plague other actors during the litigation process" because they have more experience).

In the end, a theory that is concerned principally with the outward form of choice rather than its underlying rationale, that fails to consider the role of professional socialization and practice skill in the exercise of judgment, that studies decision making in isolation from its institutional settings and practical constraints, and that grounds its conclusions on experiments which exclude or simplify many of the most important dimensions of their real life analogues, and all in the absence of any genuine adversarial framework, may not have much to say, even by extrapolation, about the nature of legal dispute bargaining. Judged on its stand-alone merits, therefore, there is reason to be skeptical about the prospects for success of a program to reconceptualize legal bargaining along Prospect Theory lines. These are concerns about Prospect Theory research in general, however, and not necessarily about particular Prospect Theory concepts or findings. Like economics, Prospect Theory may have useful prescriptive advice to give even if the advice is grounded in an inaccurate view of underlying reality.¹²³ To consider whether this is so, I will examine the important Prospect Theory concept of anchoring. Of all the Theory's concepts, anchoring is the one most directly connected to bargaining outcome and the one most thoroughly discussed in the legal bargaining literature. It is (or was)¹²⁴ a central element in the Prospect Theory model of decision making and judgment. If anchoring does not provide useful insights into the nature of legal bargaining, there is reason to be pessimistic about the contributions of Prospect Theory as a whole.

IV. Anchoring Described

Anchoring is the process of estimating the value of an item by starting from some initial value, usually the first number encountered, and then adjusting from that value until reaching a final or target estimate.¹²⁵ It is an automatic process that operates outside the awareness of the person doing it.¹²⁶ The initial value “may be suggested by the formulation of the problem, or it may be the result of a partial computation,”¹²⁷ but whatever its source, adjustment from it typically results in a final estimate biased in its favor.¹²⁸ Anchoring does not occur automatically whenever a number is randomly

¹²³ See Milton Friedman, *The Methodology of Positive Economics*, in *ESSAYS IN POSITIVE ECONOMICS* 3, 14-16 (1953) (arguing that false assumptions about real world conditions are unimportant as long as they predict correct results); Daniel M. Hausman, *Economic Methodology in a Nutshell*, *J. ECON. PERSP.*, Spring 1989, at 115, 119 (analyzing Friedman's approach to economics as “predictionism”); Andrew Brod, *Economics as one of the Humanities: A Comment*, 4 *S. CAL. INTERDISC. L.J.* 313, 316 (1995) (“For economists, rationality is first and foremost a useful assumption, useful because it helps them build models that happen to predict human behavior quite well . . .”). Judge Posner's well known textbook also defends economics in terms of its predictive and explanatory power rather than its descriptive accuracy. See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 17-18 (6th ed. 2003).

¹²⁴ *But see* note 45, *supra*, for a description of the debate over whether anchoring is fundamental.

¹²⁵ Orr & Guthrie, *Anchoring*, *supra* note 34, at 599-600; Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128; Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 799-800.

¹²⁶ Rachlinski, *The New Law and Psychology*, *supra* note 24, at 751; Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128. See also Prentice, *Chicago Man*, *supra* note 22, at 1717 (describing anchoring's role in Kahneman & Tversky's System 1/System 2 Prospect Theory framework).

¹²⁷ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128.

¹²⁸ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128; Orr & Guthrie, *Anchoring*, *supra* note 34, at 602.

mentioned. A listener must give the number sufficient attention.¹²⁹ For this to happen the number must relate to the target value in some way, or have what the Prospect Theory calls “anchor-target compatibility.”¹³⁰ The most common negotiation anchor is the opening offer or demand, but insurance policy limits, statutory damage caps, negotiator aspirations, and other “first numbers” can be anchors as well.¹³¹ Relying on anchors is not invariably bad. Sometimes the first number encountered in thinking about a problem is a useful benchmark for determining the problem’s eventual resolution, but irrelevant or uninformative information can be anchors as well, and when it is, it can distort the decision process and cause bargainers to make unwise judgments.¹³²

While anchoring is endemic to dispute settlement generally, most agree that it exercises its greatest influence in private negotiation where the lack of public monitoring permits it to operate relatively unchecked.¹³³ For many legal bargaining theorists, anchoring is a basic truth of bargaining,¹³⁴ and one that overrides traditional bargaining rules of thumb with which it conflicts. For example, proponents of anchoring argue that a bargainer always should make the first offer, even if he does not expect it to be the specific proposal on which the parties ultimately will agree.¹³⁵ The reason is simple. Settlement invariably falls between the parties’ initial offers—one does not usually receive more than is requested or give more than is demanded¹³⁶—and a bargainer who makes a high first offer imbalances the bargaining range in his favor. When the parties

¹²⁹ Chapman & Johnson, *Incorporating the Irrelevant*, *supra* note 96, at 123.

¹³⁰ Chapman & Johnson, *Incorporating the Irrelevant*, *supra* note 96, at 123-24. Chapman and Johnson give the example of an experiment in which different groups of subjects were asked to estimate the height or width of the Brandenburg gate. Each group was given a random number that expressed the dimension of height or width, but those who were given a number of the same dimension as the one they were asked to provide (i.e., a number with anchor-target compatibility), showed a greater propensity to anchor on the number than those who were given a number of a different dimension. *Id.* (citing Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36).

¹³¹ Orr & Guthrie, *Anchoring*, *supra* note 34, at 598.

¹³² Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 799 (“[I]ndividuals sometimes anchor on values that are largely, or even completely, irrelevant.”); Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2033 (“several studies show that truly preposterous anchors influence judgment”).

¹³³ Orr & Guthrie, *Anchoring*, *supra* note 34, at 609 (“[A]nchoring . . . may be even more insidious [at the bargaining table] than in the courtroom because negotiation is so much more common than adjudication . . . [it thus] may lead to much ore inefficiency and inequity . . .”).

¹³⁴ Orr & Guthrie, *Anchoring*, *supra* note 34, at 598 (“we find that anchoring has a powerful impact on negotiation outcomes”); Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 799 (“To estimate the value of an option, negotiators are likely to start with the value of a known option, the ‘anchor,’ and then adjust to compensate for relevant differences in the character of the known and unknown item.”).

¹³⁵ THOMPSON, THE MIND AND THE HEART, *supra* note 94, at 49 (“Distinct advantages are associated with making the first offer in a negotiation.”); Orr & Guthrie, *Anchoring*, *supra* note 34, at 624-25. This is just one of the many ways in which a Prospect Theory based conception of legal bargaining differs from a communitarian conception of bargaining. See Condlin, *Bargaining With a Hugger*, *supra* note 89, at 1-2 n.3 (describing communitarian conception of bargaining). The Prospect Theory concept of de-biasing is another example. Asking a bargainer to “consider the opposite” in assessing the anchor value of an offer assumes that the offer will be contested and that there always will be something to be said for the other side. See notes 202-203 *infra*, and accompanying text, for a discussion of the strategy of “consider the opposite.” Communitarians often assume that bargainers on both sides have the same interest. Condlin, *Bargaining With a Hugger*, *supra* note 89, at 1-5.

¹³⁶ THOMPSON, THE MIND AND HEART, *supra* note 94, at 47-48.

divide the range roughly in half, as almost invariably they will,¹³⁷ this guarantees that the party with the comparatively higher first offer will win a disproportionate share of the items in dispute.¹³⁸ This dynamic can dominate even the substantive strengths and weaknesses of the parties' claims. Bargainers with high aspirations and weak cases can outperform bargainers with low aspirations and strong cases,¹³⁹ or so Prospect Theory based bargaining theory has it.

How anchoring works this magic is open to debate.¹⁴⁰ The so-called social implications theory¹⁴¹ holds that bargainers rely on the information in anchors because they believe it will be helpful; that others would not volunteer the information if that were not the case. Here, the operative (and problematic) concept seems to be that of warranted belief, not anchoring. Someone who accepts information as reliable simply because another person has provided it has an incomplete understanding of the concept of warranted belief. The "insufficient adjustment theory"¹⁴² explains anchoring as a "failure to adjust" away from the anchor.¹⁴³ This explanation begs the question, of course,¹⁴⁴ since one must then ask why people fail to adjust. Orr and Guthrie's patch, that a failure to adjust is explained by a "lack of cognitive effort,"¹⁴⁵ seems equally empty. "I just didn't think" explains a lot in life, but not in a way that advances understanding or provides direction about how to proceed. Telling something to think harder is like telling a little league pitcher to "throw strikes." Most people, even little leaguers, get that far on their own.¹⁴⁶

The "numeric priming theory"¹⁴⁷ argues that the first number mentioned in thinking about a problem has a "priming"¹⁴⁸ effect on a person's decision making process

¹³⁷ Winning and losing is obvious if the parties do not divide the range in a roughly equal fashion and few bargainers are willing to lose in an obvious fashion.

¹³⁸ THOMPSON, *THE MIND AND HEART*, *supra* note 94, at 47-48. Both sides cannot act on this advice, of course, just as they cannot both act on the traditional advice to "never make the first offer." Many bargaining rules of thumb assume the presence of a less skilled adversary.

¹³⁹ THOMPSON, *THE MIND AND HEART*, *supra* note 94, at 47-48.

¹⁴⁰ I take my organization of this section of the discussion from Orr and Guthrie. *See* Orr & Guthrie, *Anchoring*, *supra* note 34, at 598-606.

¹⁴¹ Orr & Guthrie, *Anchoring*, *supra* note 34, at 602.

¹⁴² Orr & Guthrie, *Anchoring*, *supra* note 34, at 602-03.

¹⁴³ Chapman & Johnson, *Incorporating the Irrelevant*, *supra* note 96, at 120, 127.

¹⁴⁴ Orr & Guthrie, *Anchoring*, *supra* note 34, at 603

¹⁴⁵ Orr & Guthrie, *Anchoring*, *supra* note 34, at 603 (citing Chapman & Johnson, *supra* note 95). *See also* Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2026 (failure to adjust away from an anchor caused by "cognitive laziness").

¹⁴⁶ Communication from Christopher S. Condlin to author, May 30, 1993 (memory on file with author).

¹⁴⁷ Orr & Guthrie, *Anchoring*, *supra* note 34, at 603-04.

¹⁴⁸ Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 81 (the "mechanism of 'numeric priming' . . . is based exclusively on mechanisms of increased [information] accessibility"). The concept of "priming" analogizes the hydraulic process of preparing a mechanical device for operation by pouring a liquid into it (e.g., water into a pump, gasoline into a carburetor), to the intellectual and emotional process of preparing a bargainer to look favorably upon a demand by mentioning that demand early in the beginning conversation (pouring it into the other bargainer's head, so to speak). Since ideas and emotions are not hydraulic, the concept of "priming" seems more an evocative metaphor than an analogy, but Strack

independent of the number's relevance. The number's increased salience as a consequence of being mentioned makes it more accessible to the listener in the hypothesis testing process that leads to judgment, and thus gives it a greater influence on the outcome of that judgment.¹⁴⁹ As Strack and Mussweiler put it, "[I]f we have to make judgments under suboptimal conditions, we are particularly likely to use what is at the top of our minds as a basis of our judgments."¹⁵⁰ That a first number should be influential simply because it is first is not a self-evident proposition, however, particularly in bargaining where first numbers are routinely exaggerated and known to be so, and Strack and Mussweiler do not discuss this complication.¹⁵¹ "The most widely accepted explanation of anchoring,"¹⁵² the "information accessibility theory,"¹⁵³ holds that an anchor has weight because thinking about it gives it weight, and that one cannot help thinking about it once it is mentioned. On this view, the information in an anchor is influential because it is "salient," "accessible," or "available," and sometimes the only information one has.¹⁵⁴ Whatever the explanation, and each of the above efforts falls short in some respect, most legal bargaining theorists now agree that "the number that starts the generation of a judgment exerts a stronger impact [on that judgment] than do subsequent pieces of numeric information."¹⁵⁵

and Mussweiler also describe the cognitive process through which an anchor number leads to judgment. Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 80-83.

¹⁴⁹ Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 82 ("That is, even though the possibility that a target possesses the property implied by the standard is rejected and qualified, information that is consistent with this possibility will be activated and thereby be more accessible for subsequent use. As a consequence, the absolute judgment will be assimilated toward the standard of comparison.") Strack and Mussweiler acknowledge that "unless [a number value] is associated with a semantic dimension, it is difficult to conceive how [it] can by itself become the basis of a judgment," *id.* at 81, but argue that "abundant research demonstrating [that] semantic [content] influences [judgment] suggests that a similar mechanism may also be responsible for assimilation effects in the anchoring paradigm."). *Id.*

¹⁵⁰ Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 80.

¹⁵¹ Strack and Mussweiler discuss the role of anchoring in conversation only briefly, and then only to describe studies of the Gricean Maxim of Quantity (requiring "people to find the right level of specificity for their contributions to a conversation"). Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 90 (citing H. Paul Grice, *Logic and Conversation*, in 3 SYNTAX AND SEMANTICS: SPEECH ACTS 41 (Peter Cole & Jerry L. Morgan eds., 1975)). They focus principally on how "[vague verbal quantifiers] are calibrated by 'anchoring' the reference system of a communicator and by establishing an ordinal structure of targets on a response scale," but do not say how anchoring can be used adversarially to shape another party's calculation of value. Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 90. *See also* Daniel Kahneman & Amos Tversky, *On the Study of Statistical Intuitions*, 11 COGNITION 123, 135 (1982) ("We conclude that the conversational aspect of judgment studies deserves more careful consideration than it has received in past research, our own included."); Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1980-84 (describing developments in heuristics and biases research since the work of Kahneman and Tversky focused on "experimental conversations").

¹⁵² Orr & Guthrie, *Anchoring*, *supra* note 34, at 604.

¹⁵³ Orr & Guthrie, *Anchoring*, *supra* note 34, at 604-05.

¹⁵⁴ In this sense, it is not clear how this explanation differs from the numeric priming theory. Each seems a different formulation of the idea of accessibility.

¹⁵⁵ Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 80. *See also* Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2027 ("Regardless of the underlying explanation, anchoring is a powerful phenomenon.").

Perhaps the most venerable illustration of the power of anchoring, and a favorite of legal bargaining theorists,¹⁵⁶ is the so-called African Countries in the United Nations experiment conducted by Kahneman and Tversky in the 1970s.¹⁵⁷ The experiment was as simple as it was ingenious. Kahneman and Tversky divided their subjects into a number of groups and asked each subject to estimate the percentage of African countries in the United Nations.¹⁵⁸ Before permitting them to do this, however, the researchers spun a “wheel of fortune” in the subjects’ presence, rigged to stop at different numbers for different groups.¹⁵⁹ The subjects then were asked to say whether the percentage of African countries was higher or lower than their respective wheel numbers, and to estimate the actual percentage by moving up or down from the numbers.¹⁶⁰ Each group of subjects produced a different median estimate. In the two examples reported by Kahneman and Tversky, the median guess of those in a group shown the wheel number of ten was twenty-five percent, and the median guess of those in a group shown the wheel number of sixty-five was forty-five percent.¹⁶¹ An irrelevant number, generated by the spin of a wheel, seemed to have influenced the subjects’ decisions and this, Kahneman and Tversky concluded, was irrational.¹⁶²

Social scientists have conducted numerous anchoring experiments since Kahneman and Tversky’s pioneering effort,¹⁶³ testing the effect of different sorts of

¹⁵⁶ Orr & Guthrie, *Anchoring*, *supra* note 34, at 600. Legal bargaining theorists also use the experiment as evidence of the power of anchoring. *Id.*; Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2026; Richard Birke & Craig R. Fox, *Psychological Principles in Negotiating Civil Settlements*, 4 HARV. NEGOT. L. REV. 1, 10 (1999).

¹⁵⁷ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128. Strack and Mussweiler call it “one of the most dramatic demonstrations” of the power of anchoring available. Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 80.

¹⁵⁸ In the complete experiment subjects were asked to estimate a number of different things, the percentage of African countries in the United Nations was only one of them. Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128.

¹⁵⁹ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128.

¹⁶⁰ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128.

¹⁶¹ This was a so-called between-subjects experiment, in that it compared the median response of one group of subjects to the median response of another group. Its corollary, the so-called within-subjects experiment, would compare the responses of individual subjects within a group, tested under different conditions, with one another. Each type of experiment has strengths and weaknesses and there is a difference of opinion over which design provides more trustworthy insights. Compare Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1946-54 (discussing the comparative strengths and weaknesses of between-subjects and within-subjects experiments) with Prentice, *Chicago Man*, *supra* note 22, at 1679-86 (same).

¹⁶² Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128 (“arbitrary numbers had a marked effect on estimates”). “Irrational” in this context means based on an error, rather than completely devoid of reason. See Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1972 (“Kahneman and Tversky, like many other behavioral decision theorists, sought to elicit errors to illuminate underlying psychological processes rather than determine the prevalence of irrational behavior.”). See also Mitchell, *Why Law and Economics*, *supra* note 30, at 81 (“application of . . . [procedural rationality] principles does not necessarily lead to the most adaptive or best solution to any given decision problem.”).

¹⁶³ Orr & Guthrie, *Anchoring*, *supra* note 34, at 615-17 tbl.3 (listing the various studies included in meta-analysis of anchoring studies). See also Prentice, *Chicago Man*, *supra* note 22, at 1678 (“The rich literature of heuristics and biases . . . includes thousands of studies seeking to confirm, rebut, and/or [sic] determine the limits and conditions of the K-T findings.”) and at 1695 (“Many of the important heuristics

anchors on a wide variety of predictive and probabilistic judgments about quantity and value, and most of these experiments have reached the same or a similar conclusion.¹⁶⁴ Anchoring, according to this research, is a pervasive feature of human decision making, a basic characteristic of “rational” life. While its contributions to ordinary judgment can be mixed, sometimes providing helpful shortcuts and sometimes misleading distortions, within legal dispute settlement anchoring’s effects are potentially pernicious because they can cause judges and lawyers to resolve legal claims on the basis of factors that have little or no relationship to the claims’ substantive merits.¹⁶⁵ Moreover, bargainers who are aware of the anchoring heuristic, say legal bargaining theorists, are able to exploit it to obtain better than average results, even when they “cannot possible justify” them,¹⁶⁶ and this also is a cause for concern.

V. Anchoring Research and Legal Bargaining

Anchoring may or may not be a pervasive feature of decision making generally; that is for others to say. The important questions for legal bargaining theory are whether it is a factor in the legal dispute settlement process and if so, what type of influence it exerts. Is it a magic bullet for manipulating adversaries, a low-level distraction easily neutralized by understanding and skill, a structural determinant of outcome, or what? Just how concerned should legal bargainers be about the sub rosa influence of anchors? These and other such questions will occupy us in the sections that follow.

1) Anchoring Is Often Rational

While some legal bargaining scholars argue that the African Countries experiment is proof that individuals can be induced to make bargaining judgments on the basis of irrelevant information, there may be more going on in the experiment than meets the eye. Consider the situation facing the subjects. If someone did not know the percentage of African countries in the United Nations (and who, except for the occasional game-show wannabe, would?),¹⁶⁷ he would have to guess. Guessing, by definition, does not involve

and biases in the Kahneman and Tversky tradition have been demonstrated in literally hundreds of published studies.”)

¹⁶⁴ Orr & Guthrie, *Anchoring*, *supra* note 34, at 621-28 (describing the results of various studies testing the impact of an opening number on negotiation outcome).

¹⁶⁵ Orr & Guthrie, *Anchoring*, *supra* note 34, at 608-10. In two well known experiments involving personal injury claims, for example, subjects awarded less money to plaintiffs whose insurance policy limits were lower than those of other plaintiffs with identical claims. *See id.* at 609-11 (citing Jeffrey J. Rachlinski & Chris Guthrie, *Litigation Stakeholders: Repeat Player Resistance to Cognitive Bias* (working paper Feb. 17, 2006)). Another set of subjects settled identical claims for defective goods for smaller amounts with parties who made low opening demands than with parties who made high opening demands. *See* Russell Korobkin & Chris Guthrie, *Opening Offers and Out-of-Court Settlement: A Little Moderation May Not Go a Long Way*, 10 OHIO ST. J. ON DISP. RESOL. 1, 19 (1994).

¹⁶⁶ Orr & Guthrie, *Anchoring*, *supra* note 34, at 625.

¹⁶⁷ Questions in anchoring experiments usually ask about game-show type information that most people would not be expected to know (e.g., the length of the Mississippi River, the frequency of fraud in large corporations, the average temperatures in San Francisco, the relationship of the width of the Brandenburg Gate to its height, the number of top-ten Beatles’ records, and the like). *See* Reid Hastie, *A Review from a High Place: The Field of Judgment and Decision Making as Revealed in its Current Textbooks*, 2 PSYCHOL. SCI. 135, 138 (1991) (describing behavioral decision theory experiments as often

a rational calculation (though the decision to guess might). Reason might limit the range of acceptable guesses (no one would guess one hundred percent, for example, or zero percent), but it does not identify the best guess within that range, and the range could be very large.

A guess is an opinion not supported by evidence or reasoning.¹⁶⁸ Guessing is like playing the lottery. Any answer could be correct but there is no way of knowing in advance whether it will be. Under these conditions, almost any method for choosing an answer is as sensible (i.e., rational) as almost any other method.¹⁶⁹ Identifying the percentage of African countries based on the spin of a wheel is a little like picking a lottery number based on a birth date (wedding anniversary, license plate, day of the week, or whatever). It has as much or as little chance of succeeding as any other method in a situation in which no option has any quantifiable chance of success.¹⁷⁰ This does not make choosing on the basis of the spin of a wheel rational, but neither does it make it

based on “60-second brainteaser problems”). Subjects might view questions of this sort as “extra-rational” and dismiss them as not serious. This, in turn, could authorize a kind of “extra-rational” behavior in response. Cf. Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1979 (“A great deal of research in the last ten years has shown that subjects often provide non-normative responses in behavioral decision-making experiments not because the subjects are incapable of acting rationally but because the experimental situation indicates, or communicates, that the non-normative response is the correct or desired answer under the circumstances.”). Mitchell illustrates the point using the Guthrie et al. study of federal judges as an example. *Id.* at 1996-2002 (citing Guthrie et al., *supra* note 108). He argues that it is not possible to conclude that the judges committed reasoning errors in filling out their questionnaires without knowing the judges’ objectives. *Id.* at 1999 (“Indeed, if a judge’s goal was simply to complete the questionnaire as quickly as possible, then randomly answering the questions may have been the most efficient route to achieving this goal.”); see also Prentice, *Chicago Man*, *supra* note 22, at 1713 (“Mitchell’s attack . . . is that . . . the judges’ main goal was simply to complete the questionnaire as quickly as possible so that they could get out to the golf course.”).

¹⁶⁸ See MERRIAM WEBSTER’S COLLEGIATE DICTIONARY 555 (11th ed. 2007) (“Guess . . . to form an opinion of from little or no evidence”).

¹⁶⁹ Setting a reservation price in bargaining presents a similar situation. See Korobkin, *Aspirations*, *supra* note 34, at 38 (“the factors that logically should inform the plaintiff’s reservation price are often difficult to assess and fraught with uncertainty, making the normative determination of a reservation price in accordance with the standard [economic] model difficult. Given this practical difficulty, a plaintiff might base her reservation price, at least in part, on information that is not logically relevant from a normative perspective.”). The experiment rewarded only correct answers, not answers that were close to being correct. *Id.* The absence of multiple choice questions also prevented subjects from increasing their chances of being correct by eliminating less probable answers first. Residual SAT test-taking skills thus were of no value in the experiment.

¹⁷⁰ The justification for extraterritorial service of process (also referred to as “substitute” or “publication” service), on unknown or missing beneficiaries in a trust accounting is based on a similar idea. See *Mullane v. Cent. Hanover Bank & Trust Co.*, 339 U.S. 306, 317 (1950) (“This Court has not hesitated to approve of resort to publication as a customary substitute [for personal service] in another class of cases where it is not reasonably possible or practicable to give more adequate warning. Thus it has been recognized that, in the case of persons missing or unknown, employment of an indirect and even a probably futile means of notification is all that the situation permits and creates no constitutional bar to a final decree foreclosing their rights.” There is no reason to believe such service will work, but there also is no reason to believe that it is any less likely to work than other available options.).

irrational.¹⁷¹ It is simply an operational example of the familiar decisional aphorism of “any port in a storm.”

Determining how to interpret the African Countries experiment is complicated further by the fact that the subjects in the experiment simply may have been following an order to anchor. They were told to make the wheel number the baseline from which to calculate their final estimates¹⁷² and in going along with this instruction they may have been trying to be dutiful research subjects. Seen in this way, their estimates would be the result of a quasi-Milgram effect,¹⁷³ a nonviolent variation of the tendency to obey the

¹⁷¹ See Jolls & Sunstein, *Debiasing through Law*, *supra* note 46, at 204 (“Bounded rationality is hardly the same as irrationality.”). Alex Stein argues that there is no reason to treat “the narrow paradigm of [economic] rationality . . . as a baseline for assessing people’s performance Why not adopt . . . the inclusive liberal position that perceives rationality as a complex and multifaceted phenomenon?” Stein, *A Liberal Challenge*, *supra* note 86, at 534. “There are many different rationalities,” rather than just one, “and [Prospect Theory’s] experimental designs need to take this pluralism into account.” *Id.* at 540.

¹⁷² Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128. *But see* Strack & Mussweiler, *Heuristic Strategies*, *supra* note 36, at 81 (arguing that because the anchor number was “randomly generated by a spinning wheel of fortune in front of the participants’ eyes” it is difficult to explain its influence as a consequence of the participants trusting a “conversational inference” made from the researchers’ instructions).

¹⁷³ “Milgram effect” takes its name from a series of social-psychology experiments conducted at Yale in the 1960s, designed to measure the willingness of people to obey authority figures even when instructed to perform acts that conflicted with personal conscience. In the actual Milgram Experiments subjects were instructed to administer electric shocks to “learners” who made mistakes answering questions. The experiments are named for Stanley Milgram, a Yale social psychologist who ran the first iteration in 1961. Stanley Milgram, *Behavioral Study of Obedience*, 67 J. ABNORMAL & SOC. PSYCHOL. 371 (1963); *see also* STANLEY MILGRAM, *OBEDIENCE TO AUTHORITY: AN EXPERIMENTAL VIEW* (1974). Milgram described the lessons learned from the experiments in this way:

The legal and philosophic aspects of obedience are of enormous import, but they say very little about how most people behave in concrete situations. I set up a simple experiment at Yale University to test how much pain an ordinary citizen would inflict on another person simply because he was ordered to by an experimental scientist. Stark authority was pitted against the subjects’ strongest moral imperatives against hurting others, and, with the subjects’ ears ringing with the screams of the victims, authority won more often than not. The extreme willingness of adults to go to almost any lengths on the command of an authority constitutes the chief finding of the study and the fact most urgently demanding explanation.

Stanley Milgram, *The Perils of Obedience*, HARPERS, Dec. 1973, at 62, 62. Like other mid-twentieth century projects of a similar nature the experiments were prompted, in part, by the rise of authoritarian political regimes across the world and the desire to understand what could cause citizens to support them. The experiments were preceded by the so-called Asch Conformity Experiments conducted by the American Gestalt psychologist Solomon Asch in the early 1950s, *see* Solomon E. Asch, *Opinions and Social Pressure*, 193 SCI. AM. 31 (1955), and were followed by the infamous Stanford Prison Experiment conducted by Philip Zimbardo (a high school classmate of Milgram’s) in the 1970s. *See* Craig Haney, Curtis Banks, & Philip Zimbardo, *Interpersonal Dynamics in a Simulated Prison*, 1 INT’L J. CRIMINOLOGY & PENOLOGY 69 (1973). The Stanford Experiment has an official website. *See* Stanford Experiment, <http://www.prisonexp.org/> (last visited Jan. 16, 2008). For a description of a 2006 facsimile of the Milgram experiments performed at Santa Clara University, *see* Jerry M. Burger, *Replicating Milgram: Would People Still Obey Today?*, 64 AM. PSYCHOLOGIST 1 (2009). Professor Mitchell describes other ways in which “social factors or sources of uncertainty may dramatically affect the subject’s construal of the task.” Mitchell, *Why Law and Economics*, *supra* note 30, at 108; Mitchell, *Taking Behaviorism Too Seriously?*,

instructions of research directors in social science experiments, even when it makes no sense to do so.¹⁷⁴ Research subjects do all kinds of strange things when told to, but that does not mean that they would take the same direction from adversaries in real life bargaining.¹⁷⁵ In fact, one of Prospect Theory's principal biases suggests quite directly that they would not. The so-called reactive devaluation bias holds that bargainers view proposals from adversaries as "less desirable than [they] otherwise would merely because [an adversary] has offered [them]."¹⁷⁶ Reactive devaluation and anchoring would seem to work at cross purposes in bargaining,¹⁷⁷ therefore, cancelling one another out as if "paired in the voting."¹⁷⁸

There is an additional complication. Kahneman and Tversky gave each group of subjects a different wheel number, but the relationship of each wheel number to its respective group's median estimate was not the same. The wheel number of ten, for example, was closer to the corresponding group estimate of twenty-five percent than the wheel number of sixty-five was to the corresponding group estimate of forty-five percent; and one group's estimate was higher than the wheel number, while the other's was lower.¹⁷⁹ If Prospect Theory is correct about the influence of anchor numbers, these differences seem a little surprising. If the wheel numbers acted as anchors one would have expected them to exert their influence in roughly the same way in each circumstance, but that did not happen. Subjects in each group seemed to reason first, and

supra note 22, at 1981-82 (describing how research participants assume that utterances of researchers are meaningful and try to make sense of and abide by them) (citing Norbert Schwarz, *Judgment in a Social Context: Biases, Shortcomings, and the Logic of Conversation*, 26 *ADVANCED EXPERIMENTAL SOC. PSYCHOL.* 123, 154-56 (1994)). *But see* Prentice, *Chicago Man*, *supra* note 22, at 1707 (describing how "[r]esearchers are well aware of the impact of . . . [subjects] try[ing] to please the experimenter").

¹⁷⁴ This tendency often is unknowing and harmless. Alex Stein describes a similar situation in his discussion of the Blue Cab experiment. *See* Stein, *A Liberal Challenge*, *supra* note 86, at 538 (subjects in the experiment "knew nothing about the correlation . . . between cab distribution in the city and the accuracy of cab-identifying witnesses. They therefore had an epistemological warrant to believe the witness by assessing the accuracy of his cab identification as 80% probable [as the experimenter had told them]. This assessment was as rational as one that does take the cab distribution into account. The choice between the two approaches depends on how one wants to allocate the risk of error; there is more than one rational way of doing it.").

¹⁷⁵ *See, e.g.*, Dan Coates & Steven Penrod, *Social Psychology and the Emergence of Disputes*, 15 *LAW & SOC'Y REV.* 655, 667 (1980-1981) ("It is often difficult to generalize from results obtained under such [experimental] conditions to more realistic injurious experiences and disputes.").

¹⁷⁶ Lee Ross & Constance Stillinger, *Barriers to Conflict Resolution*, 7 *NEGOT. J.* 389, 392 (1991) (describing reactive devaluation); *see* Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 804-05 (same); Korobkin & Guthrie, *Psychological Barriers*, *supra* note 34, at 150-60 (same).

¹⁷⁷ Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 805 (acknowledging that the reactive devaluation heuristic can "cause a negotiator to reject a proposed agreement . . . when she would have made precisely the opposite choice had the same proposal emanated from another source.").

¹⁷⁸ In this respect, Prospect Theory biases may be similar to the canons of statutory construction. In Karl Llewellyn's well known terminology, for example, every "Thrust" may have a countervailing and neutralizing "Parry." Karl N. Llewellyn, *Remarks on the Theory of Appellate Decision and the Rules or Canons About How Statutes Are to Be Construed*, 3 *VAND. L. REV.* 395, 401-06 (1950) (arguing that "there are two opposing canons on almost every point" and appending a list of "Parry" and "Thrust" canons). *But see* ANTONIN SCALIA, *A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW* 27 (1997) ("Llewellyn's 'Parries' do not contradict the corresponding canon but rather merely show that it is not absolute.").

¹⁷⁹ Tversky & Kahneman, *Judgment*, *supra* note 46, at 1128.

then to guess, but each in a different way. The subjects in the forty-five percent group appear not to have allowed the wheel number of sixty-five to inflate their estimates beyond what seemed reasonable, just as the subjects in the twenty-five percent group appear not to have allowed the wheel number of ten to deflate their estimates below what seemed reasonable. Subjects in the sixty-five group calculated down from the wheel number¹⁸⁰ and subjects in the ten group calculated up, suggesting that all of the subjects made rough reasonableness calculations before using the wheel numbers to shape their guesses.¹⁸¹ In a world with no better option, this seems a perfectly sensible thing to do.¹⁸²

2) Anchor Numbers Usually Do Not Have Independent Influence

Anchor numbers do not exist as free-standing entities, shaping settlement agreements all by themselves. All moderately complex legal bargaining contains a cacophony of numbers, both spontaneous and planned, imbedded in the proposals, offers, arguments, and off the top of the head comments of the parties and their lawyers. Some of these numbers will turn out to be similar, or even identical, to final settlement terms and some will not, but all of them will depend for their influence—their anchoring effect if you will—not on what they say but on how they are defended and justified. It is the advocacy and leveraging moves made in support of anchor numbers that give the numbers their force and not the numbers themselves. In a sense, anchor numbers are an outcome of a negotiation as much as they are a cause of a negotiation outcome, or, perhaps more accurately, they are an outcome of the advocacy and trading contests between opposing bargainers that constitute negotiation.

The best way to understand how anchor numbers blend with party maneuvers, situational forces, and structural factors to shape final agreement is to examine the process in operation in an actual negotiation. I describe such a negotiation in the article *Bargaining With a Hugger*.¹⁸³ While working in Charlottesville, Virginia, for the hypothetical Drill Company (Drillco), Phillip Paine was offered a one-year assignment at the company's Venezuelan refinery. He was told that while on assignment he would be given fixed-foundation housing and permitted to return to the United States to deal with emergencies. When he arrived in Venezuela, however, he was offered mobile home housing and when he returned to the United States to resolve a problem with his mortgage he was fired for "leaving Venezuela without permission." Paine was the only

¹⁸⁰ This might not be true for each member of the subject group. Kahneman and Tversky report median estimates, not individual answers. *Id.*

¹⁸¹ Some Prospect Theory experiments ask subjects to generate their own anchors. See, e.g., Nicholas Epley & Thomas Gilovich, *Putting Adjustment Back in the Anchoring and Adjustment Heuristic*, in *HEURISTICS AND BIASES*, *supra* note 36, at 139, 142-45 (when asked to estimate the freezing point of vodka, researchers found that subjects anchored on thirty-two degrees Fahrenheit on their own, without having it suggested to them, and adjusted down from that number). Interestingly, the subjects' reasoning in the African Countries experiment is similar to the reasoning process underlying common law decision making. Courts decide cases on the basis of prior cases viewed as similar; cases need not be identical to be precedent. It would be ironic if anchoring was an inappropriate basis for informal dispute settlement at the same time it was a linchpin of formal dispute settlement.

¹⁸² Tversky & Kahneman, *Judgment*, *supra* note 46, at 1125 (describing how subjects in another experiment "used prior probabilities correctly when they had no other information").

¹⁸³ Condlin, *Bargaining With a Hugger*, *supra* note 89, at 16-69.

African-American employee on the Venezuelan assignment and the only employee treated in this way. He filed suit against Drillco in federal district court, alleging that he was discharged on the basis of race, in violation of 42 U.S.C. § 1981 and 42 U.S.C. § 2000e.¹⁸⁴ The case was referred to a magistrate for discovery and motion practice, and the magistrate scheduled a Rule 16 pre-trial conference to discuss settlement.

The conference began with a full group meeting of the magistrate and lawyers, but when discussion turned acrimonious the magistrate adjourned the meeting to caucus privately with each side. He met with the Drillco lawyer first and without much difficulty convinced him to offer Paine twenty thousand dollars to settle the case. When he took this offer to the Paine lawyers, however, they demanded that Paine be reinstated to his previous job and be given one hundred thousand dollars for lost back pay. If Drillco did not agree, the lawyers wanted two hundred thousand dollars to compensate Paine for his lost front and back pay combined. These demands were new. They had not been pleaded, included in the pre-trial order, or mentioned in the full group meeting. The magistrate argued with the lawyers, sometimes heatedly, for about forty-five minutes, until each side agreed to a compromise offer of reinstatement plus thirty thousand dollars. The magistrate presented the compromise to the Drillco lawyer who, after some extended foot-dragging and with considerable reluctance, accepted it. This was an exceedingly pro-Paine settlement. With the elimination of front pay damages through reinstatement, Paine received more than ninety percent of what he could have hoped to win at trial. By the time the conference was over the Paine lawyers had changed the magistrate's assessment of the case, the magistrate had changed the Drillco lawyer's assessment, and Paine had done very well.

Because Paine's opening demand was large (two hundred thousand dollars without reinstatement or one hundred thousand dollars with), and because the final agreement was favorable to Paine, one is tempted to see the demand as anchoring the outcome in Paine's favor,¹⁸⁵ but that would be a mistake. In and of itself, Paine's opening demand was laughable—in fact, that was the magistrate's first reaction¹⁸⁶—and the parties might have reached the same agreement without it having been made. Only when combined with several other contingent factors did the demand play a role in shaping the final agreement. When asked to justify the two hundred thousand dollars in lost front pay (if reinstatement was denied), for example, the Paine lawyers analogized

¹⁸⁴ Drillco was represented by a senior Title VII partner from one of the country's largest law firms and Paine was represented by two private attorneys, each of whom had extensive and high-level Title VII litigation experience. The conference was videotaped and transcribed. The lawsuit was hypothetical, though it was based on an actual suit filed in New Jersey federal district court. The original action had been settled but the participants in the Drillco conference did not know the terms of the settlement. Each participant was given a complete case file (i.e., pleadings, motions, rulings, deposition transcripts, correspondence, evidentiary documents, pictures, physical evidence, research memoranda and witness profiles, all modified to make the parties anonymous) and asked to reach an agreement with the other side only if possible. The conference lasted for almost three hours. Condlin, *Bargaining With a Hugger*, *supra* note 89, at 19 n.54.

¹⁸⁵ This is particularly true when one compares the excessiveness of the Paine lawyers' opening demand to the reasonableness of the Drillco lawyer's counter offer.

¹⁸⁶ He dismissed the "one hundred thousand dollars plus reinstatement" demand with a perfunctory "No way." Condlin, *Bargaining With a Hugger*, *supra* note 89, at 37 n.116.

Paine's case to an age discrimination claim (where front pay calculations are more common because plaintiffs often do not find new work), and argued that the formula used in age cases should be used to calculate front pay damages for Paine. This argument seemed to catch the magistrate by surprise and short-circuit his efforts to challenge the two hundred thousand dollar figure. Age discrimination was not an issue in Paine's case and the magistrate, understandably, was not prepared to discuss it.¹⁸⁷ As a consequence, he gave the argument more credence (or challenged it less vigorously) than he otherwise might have and this, in turn, caused him to look less skeptically at the two hundred thousand dollar demand.¹⁸⁸ Having accepted the age discrimination argument, or not having rebutted it, the magistrate then used it to press the Drillco lawyer to agree to Paine's counter-offer. The Drillco lawyer was equally unprepared to argue age discrimination and agreed to everything the magistrate asked for.

Other non-demand factors also contributed to the outcome. The magistrate was worried that the Paine lawyers would amend their complaint to add a disparate impact claim and that this would open up the possibility of "cash register" damages at trial.¹⁸⁹ The lawyers had not threatened to do this and, in fact, had not contemplated it, but for some reason (at the time unexplained),¹⁹⁰ the magistrate was convinced that the risk was real. The lawyers had made the two hundred thousand dollar demand largely for its *in terrorem* effect and as an escalation move to make their one hundred thousand dollar demand look attractive by comparison,¹⁹¹ but in doing so, they unknowingly had exploited a private fear of the magistrate. It was the triggering of this private fear, not the two hundred thousand dollar figure itself, that gave the demand its force.¹⁹² Like the age discrimination argument, the tacit threat of a disparate impact claim was a contingent and fortuitous event in the negotiation that easily might not have occurred. The two taken together, in combination with other such events,¹⁹³ worked their influence collectively, as

¹⁸⁷ Paine was in his thirties and had not pleaded an age discrimination claim.

¹⁸⁸ The age discrimination argument might have held up under scrutiny, though the Paine lawyers did not think it would, and it might not have. But without ever being fully tested, it was given the kind of deference traditionally reserved for demonstrably correct arguments. Ideally, one would not concede to an argument that had not been defended convincingly, but it is not possible to anticipate every argument another bargainer might make, hard to admit that an argument comes as a surprise, and bad form to take a break to do more preparation. Sometimes one must go forward on wits, intuition, general knowledge and gut reaction, and unfamiliar arguments can be powerful in such circumstances, even when wrong. See GARY GOODPASTER, *NEGOTIATION AND MEDIATION: A GUIDE TO NEGOTIATION AND NEGOTIATED DISPUTE RESOLUTION* 123-35 (1997) (describing the non-rational aspects of negotiator decision-making); Birke & Fox, *supra* note 156, at 24, 36-37 (same); Korobkin & Ulen, *supra* note 33, at 1084-1109 (same).

¹⁸⁹ Condlin, *Bargaining With a Hugger*, *supra* note 89, at 31.

¹⁹⁰ The magistrate revealed later that he had presided over another pre-trial conference in which that had happened.

¹⁹¹ The one hundred thousand dollar demand might have had more influence given its greater realism, but the request for reinstatement was probably the lawyers' most successful move. By eliminating the risk of lost front pay, reinstatement eliminated the largest part of Paine's damages and pretty much guaranteed that he would come out ahead. Often, in the heat of negotiation, it is difficult to appreciate the full significance of a demand that is expressed in non-monetary terms, however, and the magistrate and Drillco lawyer had that difficulty here.

¹⁹² The lesson in the Paine lawyers' success is: "defend an aggressive first offer in a clever and powerful way," more than it is: "make an aggressive first offer."

¹⁹³ The magistrate's decision to meet with the Drillco lawyer first guaranteed that Drillco would make the first offer. The Drillco lawyer could not bring himself to make an inflated offer, given his longstanding

parts of a package of complementary and mutually reinforcing moves, and not as independent entities, to pressure the magistrate to accept Paine's demands. Agreement resulted from the confluence of many forces, in other words, not a single anchoring maneuver, and some version of this scenario is present in almost all legal bargaining.

3) Anchors Can Be Avoided or Overcome

Anchors exert less influence in “information-rich environments”¹⁹⁴ and among “expert” negotiators,¹⁹⁵ and all bargainers, even novices, can avoid or minimize their “pernicious effects” by adopting “de-biasing” strategies.¹⁹⁶ Debiasing strategies come in two principal types, inside and outside. “An inside strategy is a voluntary reasoning process designed to improve [the] accuracy of judgment[s] by creating a fertile corrective environment in the mind.”¹⁹⁷ The most effective inside strategy “calls [on a] negotiator to consider the opposite perspective before deciding whether to accept an [adversary's] offer.”¹⁹⁸ In “considering the opposite,” a bargainer evaluates an offer from both his own

relationship with the magistrate, so he made a reasonable one. The Paine lawyers did not know the magistrate and did not feel a similar compunction to be reasonable, so they countered with a greatly inflated offer. This left the bargaining range imbalanced in Paine's favor and pretty much guaranteed that he would get the better result. Contingent factors of this sort are present in all negotiation and bargaining skillfully consists, in part, of being able to identify and exploit them.

¹⁹⁴ I.e., ones in which parties have accurate information about costs, reservation prices, aspiration levels, and practical constraints.

¹⁹⁵ Orr and Guthrie seem to use “expert” as a synonym for “experienced.” For example, they describe their study as measuring the extent to which “information and expertise” limit the impact of anchoring, Orr & Guthrie, *Anchoring*, *supra* note 34, at 598, but then discuss “expertise” exclusively in terms of bargainer experience. *Id.* at 623. *See also* Kahneman, *Maps*, *supra* note 30, at 1457 (“Experienced traders . . . learned to base their choice on long-term value, rather than on the immediate emotions associated with getting or giving up objects.”). Plea bargaining between criminal defense lawyers and prosecutors illustrates the way in which experience can temper the influence of heuristics and biases. As Professor Oldfather explains, “[w]ere one to form predictions about plea bargaining based only on cognitive research, it would be logical to expect plea bargaining to be a rare occurrence, . . . [yet] over ninety percent of all criminal cases are resolved by plea bargain.” Oldfather, *Heuristics, Biases*, *supra* note 35, at 252 (citation omitted) (alteration in original). This is because criminal defendants and their lawyers are more experienced at making plea bargaining decisions than humans are at making decisions generally.

¹⁹⁶ Orr & Guthrie, *Anchoring*, *supra* note 34, at 625; *see* Trout, *Paternalism*, *supra* note 46, at 417 (“[The] lessons of the empirical work on judgment and choice . . . do not show that people CAN'T make good choices . . . [r]ather, the psychological findings show that people . . . DON'T make good choices.”). *See also* Weinstein, *supra* note 28, at 792-93 & n.27 (“Empirical work suggests that we can improve our judgment if we are conscious of our cognitive biases and practice correcting them. . . . [though] it can be difficult for even trained, careful professionals to identify and completely correct for the way our minds work.”).

¹⁹⁷ Trout, *Paternalism*, *supra* note 46, at 418 (emphases omitted); Daniel Kahneman & Dan Lovallo, *Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking*, 39 *MGMT. SCI.* 17, 24-27 (1993) (describing “inside” and “outside” perspectives on forecasting problems).

¹⁹⁸ Orr & Guthrie, *Anchoring*, *supra* note 34, at 626; Trout, *Paternalism*, *supra* note 46, at 418 (“[T]he ‘consider the opposite’ strategy . . . urges people to consider alternative hypotheses for the occurrence of the very event that they believe they understand.”); Mitchell, *Why Law and Economics*, *supra* note 30, at 133-34 n.207 (reporting on studies showing that asking subjects to consider opposing arguments helps ameliorate the adverse effects of several biases, including anchoring). Debiasing can begin even before meeting with another bargainer. Wilson and his colleagues describe how one “about to hear a speech from an untrustworthy source . . . can try to strengthen her mental defenses by engaging in anticipatory counterarguing.” Timothy D. Wilson, David B. Centerbar, & Nancy Brekke, *Mental Contamination and*

perspective and that of his adversary,¹⁹⁹ focusing on arguments for and against the offer rather than the offer's numeric content. This, say legal bargaining theorists, may prevent the offer from becoming an anchor.²⁰⁰ There is little to disagree with in this advice, of course, though there is some question of whether it needed to be said. The importance of understanding issues from multiple (including adverse) perspectives is the central message of legal education, and given its familiarity, being reminded of it is likely to leave most lawyers waiting for the rest of the story. Fortunately, there is no need to wait, since inside strategies "provide only limited protection" against anchoring.²⁰¹ Outside strategies are the ones more likely to work.²⁰²

An outside strategy "identifies features of the environment whose presence can be manipulated to produce the most accurate or desirable available outcome."²⁰³ Outside strategies are structural, not personal, changing the nature of the "problem dynamic entirely," not just the bargainer's internal state of mind.²⁰⁴ Strangely, since it looks more like an inside strategy than an outside one, Orr and Guthrie describe the adoption of an "outside view" of the bargaining problem as a prototypical outside strategy.²⁰⁵ An

the Debiasing Problem, in HEURISTICS AND BIASES, *supra* note 36, at 185, 193. They describe this strategy, somewhat prosaically, as "preparation." *Id.* at 192. Strategies undertaken before bias-inducing information is received can be the most effective, but also the most risky, because they can lead to an overabundance of caution and prevent a bargainer from learning useful information. *Id.* at 195.

¹⁹⁹ Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 524 (describing different ways of "slowing down the pace of the interaction and evaluating the appropriate response [to the adversary's position] more deliberately").

²⁰⁰ Orr & Guthrie, *Anchoring*, *supra* note 34, at 626; Trout, *Paternalism*, *supra* note 46, at 419 (describing the "fairly demanding set of conditions" necessary for inside debiasing strategies to be effective). Bargainers can avoid the effects of anchoring even in laboratory experiments. Gilbert illustrates how this is done with a study of subjects watching a video of a woman responding to questions. The subjects could not hear the woman's answers but they were given descriptions of the topics being discussed at the bottom of the screen. The subjects were divided into two groups, with one group shown uncomfortable topics and the other shown emotionally neutral ones. The woman was visibly upset throughout the questioning and subjects were asked whether they thought this meant she was an anxious person generally. Despite anchoring on the woman's nervousness, subjects who thought the questions were uncomfortable adjusted their thinking to conclude that her discomfort was produced by the questions and not her disposition, while subjects who thought the questions were neutral reached the opposite conclusion. Gilbert, *Inferential Correction*, *supra* note 36, at 170.

²⁰¹ Orr & Guthrie, *Anchoring*, *supra* note 34, at 626.

²⁰² Trout, *Paternalism*, *supra* note 46, at 420 ("[T]he more effective debiasing strategies . . . are predominantly outside strategies.").

²⁰³ Orr & Guthrie, *Anchoring*, *supra* note 34, at 626 (quoting Trout, *Paternalism*, *supra* note 46, at 420).

²⁰⁴ Orr & Guthrie, *Anchoring*, *supra* note 34, at 625-26. Trout uses a "term limits" example to illustrate the concept of an outside strategy.

Independent auditors [can be prohibited] from working with a bank or brokerage firm for more than, say, five consecutive years. Rather than simply advising auditors to be impartial, or expecting them to be professional and direct in delivering bad news to the company responsible for their employer's financial growth, th[is] outside strategy removes the threat to integrity by eliminating its source.

Trout, *Paternalism*, *supra* note 46, at 421.

²⁰⁵ The "outside/inside" distinction can be confusing. Since the adoption of an "outside view" occurs "inside" the negotiator's head, it is not clear whether, or why, it is an outside strategy. *See, e.g.,* Orr & Guthrie, *Anchoring*, *supra* note 34, at 625 ("Inside strategies are those within the negotiator's mind."). It

“outside view” ignores the details of the case at hand and “focuses [instead] on the statistics of a class of cases chosen to be similar in relevant respects to the present one.”²⁰⁶ Consulting “*Consumer Report* [sic] or Kelley’s Blue Book” [sic] to determine what to pay for an automobile, rather than “relying solely on the initial demand made by the car dealer,”²⁰⁷ or consulting “settlement and verdict data from comparable cases” to determine the value of a personal injury claim, rather than relying on an adversary’s demand, are examples of adopting an outside view.²⁰⁸ Consulting industry standards and comparable case data makes sense, of course. It is a variation of the strategy, popularized by Principled Bargaining Theory, of using “objective criteria” to determine the value of an offer.²⁰⁹ But it is not clear what the concept of de-biasing adds to the concept of objective criteria or, given the latter, why it is needed. This may be another instance of “nominalism about realism” being offered up as new theory.²¹⁰

expands the individual bargainer’s personal perspective on the problem more than it alters the incentive and constraint structure within which the bargainer operates. That notwithstanding, I will use Orr and Guthrie’s terminology.

²⁰⁶ Orr & Guthrie, *Anchoring*, *supra* note 34, at 626 (quoting Kahneman & Lovallo, *supra* note 197, at 25).

²⁰⁷ As sensible as this advice seems, many people do not seem to be aware of it. See Ian Ayres, *Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARV. L. REV. 817, 856 (1991) (“The Consumer Federation of America recently completed a survey which revealed that thirty-seven percent of consumers do not understand that the sticker price is negotiable.”). “Similarly, during interviews conducted in confidential litigation research . . . prospective jurors were asked whether ‘most people pay sticker price for their cars.’ Twenty percent of those surveyed responded ‘yes.’” *Id.* at 856 n.115.

²⁰⁸ Orr & Guthrie, *Anchoring*, *supra* note 34, at 626-27. The ultimate “outside strategy” for someone who “need[s] negotiation services [is] to hire [a] lawyer.” Orr & Guthrie, *Anchoring*, *supra* note 34, at 627. This because “experts are somewhat less susceptible to the effects of anchoring, and lawyers are the consummate expert negotiators. . . . [They are] more ‘rational’ and analytical than many other members of the population . . . [and] better able . . . to resist biases.” Orr & Guthrie, *Anchoring*, *supra* note 34, at 627-28. See also Korobkin & Guthrie, *Psychology*, *supra* note 111, at 99-100, 105-06 (reporting evidence that shows lawyers appear to be less susceptible to heuristics and biases when advising clients about settlement options).

²⁰⁹ FISHER, URY & PATTON, *supra* note 82, at 84-93 (2d ed. 1981) (describing the process of insisting on “objective criteria”). Kahneman also describes the importance of using what he describes as “canonical” criteria. Kahneman, *Maps*, *supra* note 30, at 1459 (“Absent a system that reliably generates appropriate canonical representations, intuitive decisions will be shaped by the factors that determine the accessibility of different features of the situation. Highly accessible features will influence decisions, while features of low accessibility will be largely ignored—and the correlation between accessibility and reflective judgments of relevance in a state of complete information is not necessarily high.”).

²¹⁰ Condlin, *Every Day*, *supra* note 25, at 270 (describing “nominalism about realism”). Ariel Rubinstein’s review of Steve Levitt’s once wildly popular book *Freakonomics* illustrates how common sense terminology can be used to do the work of social science jargon, and with a sense of humor. See Ariel Rubinstein, *Freak-Freakonomics*, THE ECONOMIST’S VOICE, Nov. 2006, <http://www.bepress.com/ev/vol3/iss9/art7>. See also Gerd Gigerenzer, *The Psychology of Good Judgment: Frequency Formats and Simple Algorithms*, 16 MED. DECISION MAKING 273 (1996) (describing how medical patients make better predictions when problems are presented in the common sense language of frequencies rather than the technical language of probabilities). But see Prentice, *Chicago Man*, *supra* note 22, at 1702 (“in the real world people often have to deal with problems presented as probabilities”), and 1733-34 (“as people go through life they will often be faced with problems framed as probabilities.”). De-biasing seems to have the same “paired in the voting” relationship to anchoring that other pairs of Prospect Theory heuristics and biases have to one another. See note 178 *supra* and accompanying text. Alter-ego concepts of this sort leave one where one started theoretically, although perhaps no worse for wear. The problem, as Stanley Hoffman put it in another context, is that “Jargon has invaded everything and the

4) Anchoring Is Not News

Perhaps the most prominent characteristic of the effort to adapt the insights of anchoring research to legal bargaining theory is the obviousness of it all. Many examples could be given but not wanting to belabor the point, I will limit myself to just one. It is said, on the basis of a meta-analysis²¹¹ of hundreds of anchoring studies, that bargainers may use anchors both “offensively” and “defensively.”²¹² In “playing offense . . . negotiators who are aware of anchoring can—and should—use [this awareness] to their advantage in at least two ways.”²¹³ They should “set high goals for themselves prior to the negotiation,”²¹⁴ and once they are at the bargaining table, they should “open with high demands (or low offers) . . . particularly . . . when the opposing negotiator is relatively inexperienced . . . and possess[es] relatively little information about the value of the item being negotiated.”²¹⁵ Negotiators who follow this advice, it is claimed, will “consistently outperform those who set more modest goals for themselves [because] high goal[s] . . . anchor the negotiator’s expectations about the outcome.”²¹⁶

The lesson seems to be that bargainers should be ambitious, pursue ambitions diligently, and exploit ignorance and inexperience when they have the chance.²¹⁷ This will not come as a shock to most lawyers. Few believe that low aspirations, half-hearted efforts in their behalf, and unilateral concessions to ignorance and inexperience are a formula for bargaining success.²¹⁸ One might conclude here, paraphrasing Horace, that “the mountain has labored mightily and given forth a mouse.”²¹⁹ Legal commentators

relationship of theories to reality has faded.” Craig Lambert, *Le Professeur*, 109 HARV. MAG. 32, 37 (July-Aug. 2007).

²¹¹ Orr & Guthrie, *Anchoring*, *supra* note 34, at 612-21 (describing the process of “conducting a Meta-Analysis”). See also *id.* at 611 (“Meta-analysis can help . . . overcome some of [the] methodological and interpretive difficulties” involved in working with individual studies that have “small sample sizes . . . novice negotiators, and . . . simplistic fact patterns.”).

²¹² Orr & Guthrie, *Anchoring*, *supra* note 34, at 624.

²¹³ Orr & Guthrie, *Anchoring*, *supra* note 34, at 624.

²¹⁴ THOMPSON, *THE MIND AND HEART*, *supra* note 94, at 47 (“[N]egotiators who set high aspirations end up with more of the pie than those who set lower aspirations.”).

²¹⁵ Orr & Guthrie, *Anchoring*, *supra* note 34, at 624-25.

²¹⁶ Orr & Guthrie, *Anchoring*, *supra* note 34, at 624.

²¹⁷ *Accord*, Korobkin, *Aspirations*, *supra* note 34, at 30-36 (presenting “reference point theory [of] . . . how aspirations affect the outcome of settlement negotiations”), and at 56 (describing the “benefits of high aspirations”); THOMPSON, *THE MIND AND HEART*, *supra* note 94, at 47 (same).

²¹⁸ Professor Craver describes the conventional wisdom with characteristic clarity. See CHARLES B. CRAVER, *EFFECTIVE LEGAL NEGOTIATION AND SETTLEMENT* 260 (5th ed. 2005) (“[P]eople who enter negotiations with high aspiration levels generally obtain more beneficial results than those who begin with less generous expectations. It thus behooves bargainers to commence their interactions with high demands or low offers.”). See also SHELL, *supra* note 28, at 27-30 (describing the way in which aspirations influence bargaining outcomes).

²¹⁹ Quintus Horatius Flaccus (Horace), *Ars Poetica* [Epistle to the Pisos] line 139, in *YALE BOOK OF QUOTATIONS* 371 (Fred R. Shapiro ed., 2006). Perhaps it is just the juxtaposition of Orr and Guthrie’s advice for bargainers to their summary of Prospect Theory research on anchoring that makes the advice seem so disappointing. The summary is magisterial but like the Chicago Cubs, it “raise[d] up a young boy’s hope[s] only to] crush them like so many paper beer cups . . . [and leave them like] . . . popcorn for the pigeons beneath the El track to eat.” Steve Goodman, *A Dying Cub Fan’s Last Request*, on

who offer advice of this sort typically do not say how high aspirations are developed or how high opening demands are made credible, even though these tasks are likely to prove more vexing and be ones on which help is more urgently needed.²²⁰ This is more than an academic point. Prospect Theory insights hold as much promise for the improvement of bargaining skill as they do for the development of bargaining institutions and systems.²²¹ The Theory has as much to say to practitioners,²²² in other words, as it does to system designers and policy makers, yet if it is to be taken seriously by practitioners it must tell

AFFORDABLE ART (Red Pajamas Records 1983). Much the same could be said about legal bargaining theory's use of the Prospect Theory concept of framing. At one level, bargaining theory reduces the concept to the proposition that "how one thinks about an item will affect how one values it." Few would disagree with this, or be able to do much with it.

²²⁰ Compare SHELL, *supra* note 28, at 161 (advising bargainers to open with "the highest (or lowest) number for which there is a supporting standard or argument enabling you to make a presentable case") (emphasis omitted).

²²¹ Trout makes one of the best arguments for using information about cognitive biases to create what he calls "institutional prosthetics" to aid decision making. Trout, *Paternalism*, *supra* note 46, at 414. He acknowledges that some will object to such a proposal on autonomy grounds, believing that "individuals should be permitted to simply choose a course of action, no matter how inferior that course of action is for the agent," *id.* at 415, but he denies that institutionally created debiasing strategies would violate individual autonomy. Cognitive biases, he argues, "arise independently of the will [and] are . . . external to it. . . . Therefore the protection sought from an institutional constraint focuses on something that is not the actor, a consequence that is not of an intended action." *Id.* at 416. He provides several examples of such constraints and describes how each would promote autonomy and enhance welfare. *Id.* at 425-33. *See also* Adler & Posner, *Happiness Research*, *supra* note 33, at S254 (suggesting that Behavioral Decision Theory necessarily implies that "the market economy [should be replaced] with a system of pervasive government control, one that would prevent people from choosing and would instead force them to be happy"); Jolls & Sunstein, *Debiasing through Law*, *supra* note 46, at 206-24 (describing proposals for changing substantive law based on the insights of heuristics and biases research); Christine Jolls, *Behavioral Law and Economics* 18-34 (John M. Olin Center for Studies in Law, Economics, & Public Policy Research Paper No. 342; Public Law & Legal Theory Research Paper No. 130, 2006), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=959177 ("Illustrative Applications of Behavioral Law and Economics"); Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. U. L. REV. 1165, 1224 (2003) ("[G]overnments can adopt measures [based on research on bounded rationality] that restructure decisions as a less intrusive alternative to paternalistic restrictions on choice."); Rachlinski, *The New Law and Psychology*, *supra* note 24, at 753-61 (describing applications of Behavioral Decision Theory to prevent or compensate for decision and judgment errors "in the Courtroom" and "outside of the Courtroom"); Stein, *A Liberal Challenge*, *supra* note 86, at 533 (describing structural changes which could be made to prevent "an autonomous person's bounded rationality [from taking] him down"); Mitchell, *Why Law and Economics*, *supra* note 30, at 132-38 (describing "certain [political reforms] designed to serve a debiasing function . . . without doing any harm to those unaffected by the bias or error."). Putting aside recommendations for changes in substantive law and legal institutions, changing the incentive and constraint structure within which bargaining operates to compensate for the effects of heuristics and biases seems misguided. It would conform system ideals to the limitations of bargainer skill, rather than ask bargainers to bring skill performance up to the level of system ideals. The former is a program for freezing the status quo, while the latter is one for improving it.

²²² *See* Malhotra & Bazerman, *Psychological Influence*, *supra* note 29, at 512-22 (describing how Behavioral Decision Theory insights can be converted into techniques for gaining influence in negotiation); Korobkin & Guthrie, *Heuristics and Biases*, *supra* note 37, at 798 (describing "how negotiators can exploit heuristic reasoning on the part of others for personal gain"), and at 805 (describing how "negotiators who recognize that their counterparts are likely to rely on heuristics when making the types of judgments and choices commonly required in bargaining settings can use this knowledge to increase the likelihood of securing agreements on highly favorable terms.").

them something they do not already know.²²³ Recommending that they “buy low and sell high,” in effect, does not do this.²²⁴ Anchoring is a complex and sophisticated phenomenon within Prospect Theory’s study of decision making and judgment in general, but in the hands of legal bargaining theorists frequently it is stripped of this complexity and reduced to truisms.²²⁵

Incorporating the insights of anchoring research into legal bargaining theory is no doubt worth the effort, but before this can happen several preliminary questions must be answered. The most fundamental of these questions asks how a number becomes an anchor. Is an anchor simply the first number mentioned in a bargaining conversation no matter how inflated, frivolous, or laughable, or the first number to be validated by some sort of testing process? If the latter, is an anchor number the winner of a contest between the parties’ competing substantive arguments and leveraging moves, existing in a kind of oscillating suspension between both sides’ claims until one side convinces or silences the other? If so, are the advocacy moves made in support of an anchor number more important determinants of bargaining outcome than the number itself, or are advocacy moves and anchor numbers so intertwined that it makes no sense to talk of one separately from the other? Alternatively, is an anchor number just another substantive data point, part of the body of relevant information a rational bargainer should take into account in determining what to think, and is being influenced by an anchor no more than considering all relevant evidence before deciding how to proceed? Ultimately, I expect that questions about how to defend and test anchor numbers will be more important

²²³ Compare Mitchell, *Taking Behavioralism Too Seriously?*, *supra* note 22, at 1957 (“Many studies in the judgment literature merely indicate whether a bias exists according to a particular statistical level of probability. This knowledge, however, is not adequate information for a practitioner deciding whether to be concerned about a bias.”) (quoting Jay J.J. Christensen-Szalanski & Cynthia Fobian Willham, *The Hindsight Bias: A Meta-Analysis*, 48 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 147, 149 (1991)). “Factors having small but statistically significant effects in the laboratory may pale in comparison to the force of other factors in real world settings.” *Id.* at 1959.

²²⁴ Malhotra and Bazerman provide additional advice to the practitioner. Among other things, they propose that: “Negotiators will be more likely to have an offer accepted when they have previously made an offer that was more extreme which was not accepted but which did not end the discussion.” Malhotra & Bazerman, *supra* note 29, at 518. Or, “When the issue being negotiated is of high importance to the other party, a negotiator will be more likely to have his or her offer accepted when strong rationales and justifications (e.g., appeals to higher authorities or strong norms) are presented early (rather than late) in the discussion.” *Id.* at 521. Or, “A negotiator who has strong justifications and arguments will be more likely to have his or her demands accepted if he or she (1) speaks slowly, (2) avoids being overly technical, (3) provides a written explanation of the core demands and justifications, and (4) avoids negotiating at a time when the other party is distracted.” *Id.* at 522. They also advise bargainers to “familiarize themselves with the tactics that may be used against them and actively discount their desire to comply,” *id.* at 523, and suggest “that well-prepared negotiators are less likely than ill-prepared negotiators to be influenced by the (psychological) influence attempts of the other side.” *Id.* at 524.

²²⁵ This would not be the first time a complicated social scientific concept was trivialized by overuse. Compare the treatment accorded Thomas Kuhn’s well known concept of *paradigm*. See Jeff Sharlet, *A Philosopher’s Call to End All Paradigms*, CHRON. HIGHER EDUC., Sept. 15, 2000, at A18 (discussing THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* (2d ed. 1970), and the many ways in which the concept of “paradigm” was misunderstood and misused).

inquiries for legal bargaining theorists than questions of how to identify anchor numbers in the first instance.²²⁶ They may be the same questions.

The so-called take-away lesson in anchoring scholarship, therefore, as least as presently advanced by legal bargaining scholars, seem to be this: think carefully before making and acceding to demands, avoid impulsive, thoughtless, careless, and reckless choices, take all relevant perspectives into account, draw on precedent, analogy, objective standards and relevant evidence, and always ask for a lot more than you want. None of this is controversial or counterintuitive. In fact, it is the central message of traditional legal bargaining theory and also the one expressed in the familiar law school aphorism that “there are always cases on both sides.” Why some legal bargaining theorists would repeat the message under the guise of providing new insight from social science research, is the only surprising thing. It is a little like telling an adult to look both ways before crossing the street. No doubt, there are instances in which such advice might help but most of the time offering it is not likely to have an instructional effect.

VI. Research on Legal Bargaining

Most social science research on legal bargaining is based on questionnaires asking lawyers how they bargain,²²⁷ or hypothetical decision scenarios asking college students (and others) how they would resolve the judgment questions presented,²²⁸ and neither data set is completely representative of legal bargaining practice. To begin with, lawyers do not always bargain as they say or think they do. Frequently, their reports are self-tribute and self-deception more than self-description, shaped by hopes, expectations, assumptions, and beliefs more than behavioral observations.²²⁹ And while patterns in the

²²⁶ Orr and Guthrie may disagree with this focus. Though they recommend the adoption of both “inside strategies” (those that require individual bargainers to test and evaluate anchor numbers for themselves) and “outside strategies” (those that change the incentive or constraint structures within which bargaining operates), for minimizing the impact of anchor numbers, they seem to prefer the latter. Orr & Guthrie, *Anchoring*, *supra* note 34, at 625-27. Yet, changes in the incentive and constraint structures of bargaining are likely to change only the nature of bargainer strategies and tactics. Skilled bargainers will adapt quickly to any new structural framework in which they find themselves and learn to manipulate adversaries within it.

²²⁷ Condlin, *Every Day*, *supra* note 25, at 278-92 (describing survey research on lawyer bargaining).

²²⁸ Korobkin, *Aspirations*, *supra* note 34, at 36-37 (describing an experiment in which law students were asked questions about how they would act in hypothetical bargaining decision scenarios).

²²⁹ Condlin, *Every Day*, *supra* note 25, at 282-89 (describing the difficulties involved in interpreting lawyer self-descriptions of bargaining behavior). This is not to say that questionnaire research is never useful. For an interesting illustration of how it could be, consider a variation on the Guthrie/Rachlinski experiment with insurance industry professionals. Guthrie & Rachlinski, *Insurers*, *supra* note 37, at 2023-33. Guthrie and Rachlinski distributed questionnaires to insurers and reinsurers (in two different studies), asking for settlement recommendations in two hypothetical personal injury cases. *Id.* at 2025. Among other things, the questionnaires were designed to explore whether sophisticated repeat players and stakeholders in the settlement process “have . . . cognitive skills that enable them to avoid many common errors in judgment that appear to plague other actors.” *Id.* at 2022. The results were mixed. The first iteration of the experiment (with insurers), found that policy-limits information provided in the hypothetical problems “operated as an anchor” to increase the recommended awards significantly. *Id.* at 2030. However, the second iteration (with reinsurers), found “that the [subjects] resisted the influence of anchoring on their judgments.” *Id.* at 2032. Guthrie and Rachlinski speculate about reasons for the different results, but they do not ask the subjects themselves for an explanation. *Id.* at 2032-33. This is not surprising since they were

way college students solve problems is direct observational data and thus free from the biases of self-reporting, it does not reflect the professional socialization and real life practical constraints that make academic game playing unlike real life legal bargaining. Social science research subjects live in their own distinctive world of social practices, institutional contexts, and conversational conventions, and while they bargain in that world, they do not do so in the same way that lawyers do in theirs. For different reasons, therefore, much of the social science research underlying new legal bargaining theory provides an as yet unproven foundation for prescriptive advice.

Optimally, the study of legal bargaining would be based on the recorded observations of actual legal negotiations in offices, boardrooms, courtroom corridors, and all of the other places where legal disputes are settled.²³⁰ Data of this sort would eliminate debates over the question of how lawyers behave in bargaining and permit scholars to focus on the more interesting questions of what the behavior means, how it is perceived, and what are its effects. Most bargaining scholars do not work with such data because it is nearly impossible to collect. Clients and lawyers would have to agree to record their negotiations, for one thing, and most will not do this. Information shared in bargaining may or may not be privileged,²³¹ but it is at least private and in most instances there is no reason clients would want to make it public. Lawyers also will be reluctant to

interested in how insurance professionals would resolve the problems, not why they would resolve them in a particular way. For those interested in explaining the different effects of policy-limits information in the two experiments, however, the subjects' mental states could provide important additional data. The subjects might know something not evident in their behavior—about norms, stereotypes, biases, assumptions, or other factors associated with their conceptions of professional role, station, duties, loyalties, and the like—that would help explain why policy limits were more of a concern to insurers than reinsurers. Asking them to go inside themselves, so to speak, and report on such information makes at least as much sense as asking them to step outside themselves and describe their bargaining behavior (as most questionnaire research on lawyer bargaining does). This does not mean that their explanations necessarily would be correct. The explanations would be only data, after all, and the subjects could have all kinds of reasons to dissemble, mislead, or exaggerate. They also could be mistaken, or just not know why they acted as they did. But in a circumstance like this, questionnaires that ask about mental states can supplement questionnaires that ask about behavior, and produce useful additional information in the process. See, e.g., ARGYRIS & SCHÖN, *THEORY IN PRACTICE*, *supra* note 98, at 38-42 (describing method for collecting data about mental states and illustrating how it can be used to supplement observed behavior). *But see also* Richard E. Nisbett & Timothy Decamp Wilson, *Telling More Than We Can Know: Verbal Reports of Mental Processes*, 84 *PSYCHOL. REV.* 231 (1977) (arguing that asking subjects to report their mental processes does not always produce accurate and reliable data).

²³⁰ Mitchell, *Why Law and Economics*, *supra* note 30, at 127-32 (recommending research based on “contextualized accounts of behavior,” using “experiments and simulations, survey and interview research, field studies or observational studies, and nonreactive studies.”) (citation omitted).

²³¹ Rule 408 of the Federal Rules of Evidence and its state law analogues are the principal regulations governing the availability in discovery of information disclosed during settlement negotiations. For discussions of these rules, see Jane Michaels, *Rule 408: A Litigation Mine Field*, *LITIG.*, Fall 1992, at 3; Wayne D. Brazil, *Protecting the Confidentiality of Settlement Negotiations*, 39 *HASTINGS L.J.* 955 (1988); Russell Korobkin, *The Role of Law in Settlement*, in *THE HANDBOOK OF DISPUTE RESOLUTION* 254 (Michael L. Moffitt & Robert C. Bordone eds., 2005). Private information disclosed in negotiation also can be regulated by contract though confidentiality agreements between the parties, though there are many policy objections to such agreements and state laws often preclude them. See Carrie Menkel-Meadow, *Public Access to Private Settlements: Conflicting Legal Policies*, 11 *ALTERNATIVES HIGH COST OF LITIG.* 85 (1993); Laurie Kratky Doré, *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, 74 *NOTRE DAME L. REV.* 283 (1999).

reveal the distinctive strategies they think give them an advantage in bargaining, though both the distinction and the advantage are easily overstated. Even if these obstacles could be overcome, studying bargaining on-site, in all of its multiple dimensions,²³² is the work of anthropologists more than legal scholars and anthropological methods are slow, time-consuming, and expensive. Moreover, the methods do not produce the kind of easily quantified and sorted data that the new legal bargaining theorists like to work with. There are a few interesting anthropological studies of legal bargaining,²³³ but they are likely to remain the exception for some time to come.

If data about real life negotiation is not an option sophisticated laboratory simulations are the next best alternative.²³⁴ To be useful, however, such simulations should be based on real cases and conducted spontaneously, not according to scripts, by practitioners experienced in the matters being negotiated, working with real case materials (documents, physical evidence, live witnesses, and the like), under real life time conditions, and in real life settings.²³⁵ No simulation can reproduce real life bargaining perfectly, of course. It is difficult, if not impossible, to replicate in a laboratory the social relationships, interpersonal histories, institutional constraints, practical concerns, reputational and monetary incentives, affective states,²³⁶ and working conditions that define real life bargaining. But sophisticated simulations can reproduce the wide range of skill maneuvers lawyers use in bargaining conversations and permit legal bargaining theorists to study the means by which such maneuvers used effectively. This is enough. The analysis of bargaining technique is a central subject of bargaining scholarship.²³⁷

²³² See DAVID A. LAX & JAMES K. SEBENIUS, 3-D NEGOTIATION 7-19 (2006) (describing the multiple dimensions of deal making negotiation).

²³³ The studies illustrate the difficulty of collecting real life data as much as they demonstrate its availability. Jonathan Harr's study of the Woburn leukemia cluster litigation is perhaps the best example. Harr spent several years imbedded with the plaintiff's legal team in order to write the story of the litigation, including its complicated settlement proceedings. See JONATHAN HARR, *A CIVIL ACTION* (1996). Other such studies include PETER H. SCHUCK, *AGENT ORANGE ON TRIAL: MASS TOXIC DISASTERS IN THE COURTS* (1986); GERALD M. STERN, *THE BUFFALO CREEK DISASTER: THE STORY OF THE SURVIVORS' UNPRECEDENTED LAWSUIT* (1976, reissued 2008); and JEFFREY W. STEMPEL, *LITIGATION ROAD: THE STORY OF CAMPBELL V. STATE FARM* (2008). Sometimes non-anthropological studies are described as based on real life negotiations. See, e.g., Rachlinksi, *Gains, Losses, supra* note 34, at 149 (describing the Gross-Syverud California litigation study, as "analyzing unsuccessful settlement talks") (citing Samuel R. Gross & Kent D. Syverud, *Getting to No: A Study of Settlement Negotiations and the Selection of Cases for Trial*, 90 MICH. L. REV. 319 (1991)). But usually these studies are based on numerical data taken from real life negotiation rather than on direct observational data of the negotiations themselves. See Gross & Syverud, *Getting to No, supra*, at 330-79 (comparing final settlement offers available in a verdict reporting service with the results at trial in the same cases).

²³⁴ Prentice, *Chicago Man, supra* note 22, at 1751 ("[A]s a general rule, 'real world' behavior is very similar to laboratory behavior.").

²³⁵ See Conclin, *Bargaining with a Hugger, supra* note 89, at 16-20 (describing a negotiation simulation with such qualities). Professor Minzner describes the benefits of adding such contextual information to social science experimentation. See Minzner, *supra* note 74, at 2567-71.

²³⁶ Mitchell, *Why Law and Economics, supra* note 30, at 104 (questioning whether the "relatively dispassionate written summaries of cases . . . so often used in . . . negotiation simulation studies do justice to the emotions elicited by a real case involving real lives or real pocketbooks").

²³⁷ It does not seem to be an objective of Prospect Theory research since the latter's experimental method reads skill out of the bargaining process. See discussion *supra*. For a description of the larger

Realistic simulation data also might help overcome one of the more intractable problems in collecting empirical evidence about legal bargaining. Often, scholarly discussions about legal bargaining bog down over questions of what particular bargaining moves mean. Looking at the moves from the perspectives of their different personal histories, scholars commonly disagree over such questions as whether particular statements are threatening or that reaction unduly defensive, whether demands are excessive or that reaction stingy, whether arguments are belligerent or that reaction overly sensitive, whether attitudes are arrogant or that reaction abnormally insecure, and questions of this sort need to be disentangled from judgments about whether the maneuvers in question were effective. The first question is empirical, and must be answered on the basis of directly observed data and consensus social norms, undistorted (as much as is possible) by the filters of personal taste, aesthetic sensibilities, manners, and the like. At the present, most observational data about legal bargaining comes from surveys of lawyers in which the lawyers are asked to describe and rate their negotiation experiences as part of a single undifferentiated process.²³⁸ This type of inquiry produces a vicious analytical circle in which judgments about effectiveness are commingled with and distort judgments about description, and vice versa.²³⁹ Only by separating the task of data reconstruction from the task of data evaluation will answers to the question of what lawyers do in negotiations not be determined by answers to the question of what lawyers think works. Laboratory simulations, which record and transcribe negotiations independently of the participants' views of how the negotiations went, hold the greatest promise for producing data of this sort.

VII. Conclusion

By any standard, Prospect Theory has made important contributions to the understanding of human decision making and judgment. Its criticism of the empirical assumptions of the utility maximizing model of rational choice, and its construction of an intuitively attractive and intellectually powerful alternative, has forced a major reconsideration of the normative implications of empirical scholarship. In a virtuoso fusion of science and psychology, it has created a scientific psychology for a post rational-choice age.²⁴⁰ Impressive as this accomplishment is, it does not follow that Prospect Theory has equivalent implications for legal bargaining theory. Decision making in bargaining is different from decision making in general, and the experimental

picture within which “at the table” skills operate, particularly in deal making negotiation, see LAX & SEBENIUS, *supra* note 232, at 7-19 (overview of the different dimensions of deal making negotiation).

²³⁸ See Conklin, *Every Day*, *supra* note 25, at 278-81 (describing some of the confusions in survey research on bargaining).

²³⁹ See Conklin, *Every Day*, *supra* note 25, at 281-82 (describing how the two types of judgments can intertwine).

²⁴⁰ Jeffrey Rachlinski makes perhaps the most evocative plea for accepting Behavioral Decision Theory as scientific. See Rachlinski, *The New Law and Psychology*, *supra* note 24, at 766 (“Economics provided law with a behavioral theory that is rigorous and precise, but lacks an empirical foundation. Psychology offers an empirical, scientific source for theories of human behavior. We have only begun to see how the scientific study of human behavior will reshape the study of law. The new law and psychology is just now cutting its teeth. . . . The best work, however, is yet to be done.”).

data on which Prospect Theory is based does not yet take these differences into account. As a consequence, many of the most ambitious proposals for reshaping legal bargaining theory along Prospect Theory lines are as yet unsupported by Prospect Theory findings, and the less ambitious proposals do not need a Prospect Theory pedigree. Legal bargaining theorists should continue their efforts to make bargaining scholarship more empirical, of course, since bargaining is an empirical practice. And they also should draw on social science research whenever possible in this effort since law, at least in part, is a social science. But they should approach these tasks as skeptical critics, not already committed disciples, prepared to test, modify, and refine social science insights before using them to modify legal bargaining theory. All viable theory may overlap by sixty percent, as an eminent scholar once told me, but if so, that still leaves a lot of room for irrelevance.