Flawed Thinking: Addressing Decision Biases In Negotiation

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I. INTRODUCTION

"Every decision you make is a mistake."
-Edward Dahlberg, US novelist and critic

As negotiators¹ on a constant basis,² we typically aspire to reach thoughtful, rational agreements.³ Of course, what constitutes a "rational"

¹ The term "negotiate" is used in a broad sense to mean the act of communicating formally or informally to reach agreements. Most commentators in the field define the term similarly. See, e.g., ROGER FISHER & WILLIAM URY, GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN xvii (Bruce Patton ed., 2d ed. 1991) ("[Negotiation] is back-and-forth communication designed to reach an agreement when you and the other side have some interests that are shared and others that are opposed."); GAVIN KENNEDY, KENNEDY ON NEGOTIATION 9 (1998) ("Negotiation is a process by which we search for terms to obtain what we want from somebody who wants something from us."); DAVID A. LAX & JAMES K. SEBENIUS, THE MANAGER AS NEGOTIATOR: BARGAINING FOR COOPERATION AND COMPETITIVE GAINS 11 (1986) ("[Negotiation is] a process of potentially opportunistic interaction by which two or more parties, with some apparent conflict, seek to do better through jointly decided action than they could otherwise."); ROY J. LEWICKI ET AL., NEGOTIATION: READINGS, EXERCISES & CASES ix (4th ed. 2003) ("Negotiation is a process by which we attempt to influence others to help us achieve our needs, which at the same time taking their needs into account."); GERALD I. NIERENBERG, THE ART OF NEGOTIATING 8 (1981) ("Whenever people exchange ideas with the intention of changing relationships, whenever they confer for agreement, they are negotiating."); G. RICHARD SHELL, BARGAINING FOR ADVANTAGE: NEGOTIATION STRATEGIES FOR REASONABLE PEOPLE 6 (1999) ("A negotiation is an interactive communication process that may take place whenever we want something from someone else or another person wants something from us."); LEIGH L. THOMPSON, THE MIND AND HEART OF THE NEGOTIATOR 2 (2d ed. 2001) ("[Negotiation is a] decision-making process by which two or more people agree how to allocate scarce resources.").

² Virtually all commentators note the frequency and ubiquity of negotiation. See, e.g., MICHAEL C. DONALDSON & MIMI DONALDSON, NEGOTIATING FOR DUMMIES 1 ("You negotiate all day long, not just on the job but in every situation you encounter—with your boss or your employees, with your vendors or your clients, with your spouse or your kids, even with the serviceperson who comes to your house but doesn't repair that refrigerator after all."); FISHER & URY, supra note 1, at xvii ("Everyone negotiates something every day. Like Molière's Monsieur Jourdain, who was delighted to learn that he had been speaking prose all his life, people negotiate even when they don't think of themselves as doing so."); LEWICKI ET AL., supra note 1, at ix ("People negotiate every day."); ROY J. LEWICKI ET AL., THINK BEFORE YOU SPEAK: THE COMPLETE GUIDE TO STRATEGIC NEGOTIATION 1 (1996) ("[M]any of us negotiate more than once in every waking hour, but we do not recognize the majority of these 'negotiations' as such."); SHELL, supra note 1, at 6 ("All of us negotiate many times a day."); WILLIAM URY, GETTING PAST NO: NEGOTIATING YOUR WAY FROM CONFRONTATION TO COOPERATION 3 (1991) ("We all negotiate every day.").

agreement is not always obvious,⁴ but, for most people, it means, at a minimum, that they have maximized the possibilities for reaching their goals.⁵ Unfortunately, if recent studies are to be believed, people often

Id. (emphasis added); see also SCOTT PLOUS, THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING 81-82 (1993) (describing a set of principles for rational decisionmaking).

³ One does so on the assumption that rational approaches, i.e., those based on reason, generally carry greater benefit than those of an irrational nature. Of course, that will not always be the case. Sometimes irrational approaches may produce superior outcomes—for example, where one's temper loss induces an opponent to make concessions that he or she ordinarily would not do. See Alan N. Schoonmaker, Negotiate to Win: Gaining the Psychological edge 138 (1989) (citing what he calls the "Madman's Advantage," which produces favorable results because one convinces an opponent that one will not stop pushing for his or her position whatever the cost). This approach works because irrational parties appear indifferent to the possibility of retaliation or revenge that might deter others. Id.

⁴ See, e.g., Russell Korobkin & Chris Guthrie, Psychology, Economics, and Settlement: A New Look at the Role of the Lawyer, 76 Tex. L. Rev. 77, 78 n.4 (1997) (arguing that "[t]here is no single definition of what constitutes 'rational' decision-making"). Korobkin & Guthrie offer a set of principles for rational decision-making:

⁽¹⁾ Ordering of Alternatives: rational individuals can compare alternatives and decide either they prefer one to another or are indifferent between the two; (2) Dominance: they should never prefer a decision that yields outcomes equivalent to or worse than an alternative on every dimension; (3) Cancellation: in choosing between two options, outcomes that will be the same under either choice should not affect the choice; (4) Transitivity: if choice A is preferred to choice B, and choice B is preferred to choice C, choice A is preferred to choice C; (5) Continuity: a gamble between a good outcome and bad outcome should be preferred over a certain intermediate outcome if the likelihood of the bad outcome is sufficiently low; and (6) Invariance: the way in which two options are presented should not affect the decisionmaker's choice between them.

⁵ Maximizing one's utility seems to be the key to "rational" decisionmaking. See, e.g., John P. Gould, The Economics of Legal Conflicts, 2 J. LEGAL STUD. 279, 283–84 (1973) (describing the classical economics model of rational decisionmaking as actors making choices in order to maximize utility); see also Jonathan R. Cohen, Reasoning Along Different Lines: Some Varied Roles of Rationality in Negotiation and Conflict Resolution, 3 HARV. NEGOT. L. REV. 111, 111 (1998) (noting that the term "rational" is defined similarly to that in economics: "[E]ach person is presumed to act so as to make himself or herself as well off as possible. Often this model goes by the label of utility maximization."). Professors Carroll, Bazerman, and Maury add that negotiation research focuses on the rationality of outcomes and process. See John S. Carroll et al., Negotiator Cognitions: A Descriptive Approach to Negotiators' Understanding of Their Opponents, 41 Org. Behav. & Hum. Decision Processes 352, 353 (1988). They define a "rational outcome" as one where there "is a zone of agreement that both parties prefer over

negotiate irrationally⁶ rather than as calm, deliberate, utility maximizers.⁷ To say that negotiators do not bargain rationally is not to suggest that they do so

reaching impasse, and the agreement will be such that there is not alternative joint resolution available that would be preferable to both parties." *Id.* A "rational process" to them is one where the parties have been "utility maximizers." *Id.*

⁶ See, e.g., Philip E. Tetlock, Cognitive Biases and Organizational Correctives: Do Both Disease and Cure Depend on the Politics of the Beholder?, 45 ADMIN. Sci. Q. 293, 293 (2000). Professor Tetlock summarizes current studies as follows:

Experimental research on judgment and choice casts us, human beings, in a less-than-flattering light. We fall prey, it has been claimed, to a wide assortment of errors and biases. We are too quick to draw conclusions about others, too slow to change our minds, excessively confident in our predictions, and prone to give too much weight to irrelevant cues (such as sunk costs) and too little weight to relevant ones (such as opportunity costs). Although this grim portrait has been qualified by the recent proliferation of dual-process models of judgment and choice that . . . bestow on people some limited capacity to decide how to decide the dominant emphasis in the last quarter century of experimental work has clearly been on judgmental shortcomings.

Id. (citations omitted); see also Robert Prentice, Enron: A Brief Behavioral Autopsy, 40 Am. Bus. Law L.J. 417, 422-23 (2003). Prentice argues that the

foundational assumption that people make decisions as if they are homo economicus ("Chicago Man") is indisputably wrong.... The essential notion is that rather than act as Chicago Man theoretically does, most people make many decisions that are affected by various heuristics (mental short-cuts) and biases (mental tunnels) that lead them to results that are often less than optimal.

Id.; see also Cass R. Sunstein et al., Predictably Incoherent Judgments, 54 STAN. L. REV. 1153, 1163 (2002).

It is now well-known that people are not in fact perfectly rational. They are better described . . . as boundedly rational. Because of the limitations in their ability to process information, boundedly rational agents are . . . locally coherent—achieving consistency over small regions of the space of possible events and outcomes, but not between more remote regions.

Sunstein, supra, at 1163. But 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, 73–74 (2002) (objecting both to the model of rationality and the model of irrationality—"[w]hereas law and economics assumes too much rationality on the part of legal actors as an empirical matter, behavioral law and economics errs by assuming too much irrationality").

⁷ See Amos Tversky & Daniel Kahneman, Judgment Under Uncertainty: Heuristics and Biases, 185 Sci. 1124, 1130 (1974) (describing decisionmaking biases). Professors Tversky and Kahnerman are credited with having the seminal article on bias in decisionmaking. See also Linda Babcock et al., Biased Judgments of Fairness in Bargaining, 85 AM. ECON. Rev. 1337, 1337 (1995) (noting that "empirical evidence suggests that impasses and inefficient settlements are common in the legal system and in contract negotiations"); Max H. Bazerman et al., The Human Mind as a Barrier to Wiser

Environmental Agreements, 42 AM. BEHAV. SCIENTIST 1277, 1277–78 (1999) (arguing that "one viable explanation for many sub-optimal environmental or economic negotiations is a set of common and systematic mistakes that most humans make in the negotiation process") (citation omitted); Richard Birke & Craig R. Fox, Psychological Principles in Negotiating Civil Settlements, 4 HARV. NEGOT. L. REV. 1, 1–2 (1999).

Although lawyers, like most professionals, typically believe that consistent, reasoned, objective, and rational decisionmaking characterizes their negotiations, an abundance of evidence suggests that this belief is misplaced. Research in the past few decades has documented pervasive psychological biases in the judgment and decisionmaking of a wide array of professionals and laypersons.

Burke & Fox, supra, at 1-2; see also Carroll et al., supra note 5, at 353 (noting the existence of a "large body of behavioral decision research showing that individuals deviate from the economic model of rationality in systematic and predictable ways.... [and that] substantial evidence exists to demonstrate that these judgmental deficiencies affect expert negotiators as well as naïve subjects") (citations omitted); Christine Jolls et al., A Behavioral Approach to Law and Economics, 50 STAN. L. REV. 1471, 1471 (1998) (noting that "empirical evidence gives much reason to doubt [the assumptions of rationality in neoclassical economics]"); Korobkin & Guthrie, supra note 4, at 79 (stating that the model of rational decisionmaking is "undermined by a growing body of empirical evidence demonstrating that litigants often make decisions in ways that depart from [this model]"); Roderick M. Kramer et al., Self-Enhancement Biases and Negotiator Judgment: Effects of Self-Esteem and Mood, 56 ORG. BEHAV. & HUM. DECISION PROCESSES 110, 111 (1993) (noting that both field studies and laboratory experiments have demonstrated that "negotiators are prone to a variety of judgmental biases that can adversely affect the process and outcome of their negotiations"); Robin L. Pinkley et al., "Fixed Pie" a la Mode: Information Availability, Information Processing, and the Negotiation of Suboptimal Agreements, 62 ORG. BEHAV. & HUM. DECISION PROCESSES 101, 101 (1995) (stating that research demonstrates that "negotiators consistently settle for suboptimal agreements" because of negotiators' biases); Jeffrey J. Rachlinski, Heuristics and Biases in the Courts: Ignorance or Adaptation, 79 OR. L. REV. 61, 61 (2000) (detailing studies indicating that the brain uses shortcuts to deal with complex decisionmaking and that "[r]eliance on these shortcuts, however, leaves people susceptible to all manner of illusions: visual, mnemonic, and judgmental"); Cass R. Sunstein, Behavioral Analysis of Law, 64 U. CHI. L. REV. 1175, 1175 (1997).

In the last two decades, social scientists have learned a great deal about how people actually make decisions. Much of this work calls for qualifications of rational choice models. Those models are often wrong in the simple sense that they yield inaccurate predictions. Cognitive errors and motivational distortions may press behavior far from the anticipated directions: normative accounts of rational choice should not be confused with descriptive accounts.

Sunstein, supra, at 1175; see also Leigh Thompson & Peter Kim, How the Quality of Third Parties' Settlement Solutions is Affected by the Relationship Between Negotiators, 6 J. OF EXPERIMENTAL PSYCHOL.: EXPERIMENTAL 3 (2000) ("It is well established that people bring biases to the negotiating table."); Roger Lowenstein, Exuberance is Rational, N.Y. TIMES MAG., Feb. 11, 2001, at 68-69 (describing the emerging view

arbitrarily or randomly. To the contrary, the errors that people make are often quite predictable, reflecting what appear to be certain "hard-wired" mental predispositions.⁸

Examples abound of behavior that seems difficult to justify on purely rational grounds:

- Studies show that most people will go across town to save \$10 on a clock radio but not to save \$10 on a large-screen TV despite the precise same economic "gain." Similarly, people will "leave a tip in a restaurant far from home, that they will never visit again, for a waiter they will never again see, for service already and irrevocably rendered."
- People over-weigh the present compared to the future. "For example, they often prefer to receive \$100 today than \$110 in a week, but, in odd reverse, opt for \$110 in eleven weeks over \$100 in ten weeks."
- From 1980 to the mid-1990s, seizing on what has been described as the "Chivas Regal" phenomenon, most elite private colleges and universities tripled tuition costs. These increases did not reflect increased operating costs or demand—or any other rational economic need. They reflected the schools' realization that they could take advantage of the fact that most parents equated "expensive" with "excellent." 12

among economists that most people "are prone to error, irrationality and emotion, and they act in ways not always consistent with maximizing their own financial well being").

⁸ These predispositions are often called "heuristics." For a discussion of how evolution has "hard-wired" humans, see *infra* notes 23–31 and accompanying text.

⁹ See Lowenstein, supra note 7, at 68 (citing this and other research on irrational economic behavior by University of Chicago Professor Richard Thaler, including the observation that people who will mow their own lawns to save \$10 will generally refuse to cut a neighbor's lawn for the same amount).

Owen D. Jones, Time-Shifted Rationality and the Law of Law's Leverage:
 Behavioral Economics Meets Behavioral Biology, 95 Nw. U. L. Rev. 1141, 1148 (2001).
 Id.

¹² See Karen Heller & Lily Eng, Steep Rise in Tuition is Price of Prestige, DENVER POST, Apr. 20, 1996, at A-21, available at LEXIS, News Library, DPost File (decrying the fact that "all the basic laws of economics are out of whack"). They report that the "explanation for the jump in prices has largely been a change in attitude. Educators came to realize that families equated the quality of a college education with cost: the more expensive, the better." Id. Professor Robert Cialdini describes the same phenomenon with respect to a friend who mistakenly doubled the price of slow-moving jewelry at her store (instead of halving it) only to discover that the jewelry sold out completely and quickly. See ROBERT B. CIALDINI, INFLUENCE: THE PSYCHOLOGY OF PERSUASION 1–2, 5 (1984) (describing the phenomenon as "expensive = good").

- In 1985, Ethiopia lay in financial ruins as a result of years of drought, deprivation, and civil war. Nonetheless, disregarding its infinitely greater needs at home, the Ethiopian Red Cross contributed \$5,000 to Mexico after a major earthquake in Mexico, reciprocating Mexico's financial assistance fifty years before when Ethiopia faced an invasion by the Italian Army.¹³
- Conventional economic theory holds that companies should cut workers' pay during recessions. Yet, they rarely do, preferring to lay workers off instead, a generally more costly and traumatic approach.¹⁴
- In December 2000, Tom Hicks, owner of the Texas Rangers, bid \$250 million to sign free-agent player Alex Rodriguez—roughly \$100 million more than the second highest bid. The figure represented more than the cost of the entire franchise and the stadium in which the team plays. One commentator described this purchase as "the winner's curse," noting that "whoever wins an auction generally pays more for what he's won than it's actually worth." 15

These and other examples, while seemingly unrelated, share a common theme. They all illustrate the surprisingly large extent to which humans analyze situations according to deep-inborn impulses outside the boundaries of classical rationality models.

Why do people stray so far from the classic models of rationality? First, and not surprisingly, we all face limits on our capabilities imposed by

¹³ This seemingly irrational response, which initially baffled Professor Cialdini, cleared up when he investigated the matter. His conclusion: "The need to reciprocate had transcended great cultural differences, long distances, acute famine, and immediate self-interest. Quite simply, a half century later, against all countervailing forces, obligation triumphed." See CIALDINI, supra note 12, at 21 (describing numerous other examples of reciprocity where it "was so strong that it simply overwhelmed the influence" of almost all other social forces).

¹⁴ See generally TRUMAN F. BEWLEY, WHY WAGES DON'T FALL DURING A RECESSION (1999). See also Cass R. Sunstein, The Human Variables, NEW REPUBLIC, Aug. 7, 2000, at 39, available at LEXIS, News Library, NewRpb File (reviewing Bewley's book, and describing other, similar behavior that classical economists would describe as non-rational, e.g., people tip in restaurants that they will never visit again, people comply with laws that are not enforced, or people contribute to public television even though they never receive a bill for watching).

¹⁵ The "winner's curse" is not always an example of individual irrationality. To the contrary, "[t]he paradox of the winner's curse, in fact, is that it comes into play even when all the bidders in an auction are rational." James Surowiecki, *The Agony of Victory and the Thrill of Defeat*, NEW YORKER, Jan. 8, 2001, at 31. For a discussion of the "winner's curse," see *infra* notes 250–54, and accompanying text.

shortfalls in intelligence, data, energy, memory, perceptions, patience, and time that prevent full processing of critical information. Second, and less well-recognized, people typically rely on mental "rules of thumb," often called "heuristics," in reading situations and making decisions that, while generally quite useful, 17 can sometimes produce sub-optimal approaches and decisions. 18

More and more data has accumulated in the past 25-plus years on how substantially heuristics and other biases interfere with proper negotiation decisionmaking. ¹⁹ In fact, anyone who seriously aspires to be a successful negotiator must understand and deal effectively with his or her non-rational impulses and error-prone tendencies. ²⁰ Unfortunately, costly negotiation

¹⁶ See, e.g., STEPHEN P. ROBBINS, ORGANIZATIONAL BEHAVIOR 139 (9th ed. 2000) ("In order to avoid information overload, decision makers rely on heuristics or judgmental shortcuts in decision making."); Jolls et al., supra note 7, at 1477 (noting the "obvious fact that human cognitive abilities are not infinite. We have limited computational skills and seriously flawed memories."). Professor Max Bazerman notes that these limitations mean that decisionmakers necessarily satisfice. That is, "they simply search until they find a solution that meets a certain acceptable level of performance." MAX BAZERMAN, JUDGMENT IN MANAGERIAL DECISION MAKING 4–5 (4th ed. 1998) (noting, for example, that, because "managers make hundreds of decisions daily, the systematic and time-consuming demands of rational decision making are simply not viable").

¹⁷ BAZERMAN, supra note 16, at 6 (noting that "economists would argue that individuals use heuristics because the benefit that they obtain through the time savings of the heuristic outweighs the costs of any potential reduction in the quality of the decision"); see also infra notes 32–38 and accompanying text.

¹⁸ See infra notes 39-43 and accompanying text.

¹⁹ See, e.g., Max H. Bazerman et al., Negotiation, 51 ANN. REV. PSYCHOL. 279, 282 (2000) (describing the history of negotiation research and noting that "behavioral decision research" (BDR) grew substantially in the 1980s and 1990s). According to the authors, "[t]he core argument of much of BDR is that people rely on simplifying strategies, or cognitive heuristics. Although these heuristics are typically useful shortcuts, they also lead to predictable mistakes." Id. (citations omitted).

²⁰ As the research has grown, different disciplines increasingly have focused on cognitive biases in decision making—from game theorists, see, for example, THOMAS C. SCHELLING, THE STRATEGY OF CONFLICT 16 (1960) (discussing game theory as it applies to rational decisionmaking), to social psychologists, see generally Tversky & Kahneman, supra note 7, to economists, see, for example, Lowenstein, supra note 7, at 68 (describing the growth in research of decisionmaking bias in economics), to marketers, see, for example, CIALDINI, supra note 12, at 7 (describing how marketers use stereotypes to classify things according to a few features and respond mindlessly), and lawyers, see, for example, Sunstein et al., supra note 6, at 1163.

Professor Gregory Mitchell has lodged a strong dissent to the new theories of flawed decisionmaking based on cognitive error. See Mitchell, supra note 6, at 69 (arguing that

blunders triggered by poor decisionmaking approaches abound, leading, in some cases, to calls for legal intervention to protect vulnerable citizens.²¹ As an all-too-human teacher concerned about helping students and professionals (and myself) avoid these psychological traps, I propose to analyze the general dynamic of decisionmaking (and negotiation) bias, to review the ever-growing list of identified biases, and to offer a number of suggestions for avoiding or minimizing the impact of these biases on negotiators.²²

II. HEURISTICS AND RELATED BIASES: A PSYCHOLOGICAL PERSPECTIVE

A. Evolutionary Origins

Decision heuristics and negotiation biases are so deeply ingrained²³ that they undoubtedly have an evolutionary basis.²⁴ In this respect, they are like

those who believe that cognitive illusions lead to predictable nonrational behaviors assume too much irrationality). Mitchell's dissent, in turn, has led to a heated rejoinder from Professor Jeffrey Rachlinski, who argues that Mitchell has attacked a straw man. See Jeffrey J. Rachlinski, A New Social Scientific Assessment of Law and Human Behavior: The Uncertain Psychological Case for Paternalism, 97 Nw. U. L. Rev. 1165, 1167 n.18 (2003). Rachlinski argues that Mitchell's article

refutes the claim that context or incentives do not affect the magnitude of the cognitive phenomena that psychologists have observed. Inasmuch as no one has ever advocated such a position, however, it is hard to see the value of such a refutation. Mischaracterizing a line of scholarship and then attacking that mischaracterization is a cheap academic stunt that in no way undermines the value of the new scholarship applying cognitive psychology to law.

Id.

²¹ See, e.g., Rachlinski, supra note 20, at 1166 (noting that "[n]umerous calls for restraints on the marketplace, rules governing political campaigning, and restrictions on contract formation draw support from psychological evidence that individuals cannot make good choices").

²² I wish to focus on solutions to the challenge of negotiation biases a bit more than some other authors. While much has been written on the existence of bias, too little has been done about suggesting ways of dealing with the problem. *See* Thompson & Kim, *supra* note 7, at 11 (noting that their review of the empirical literature on bias in negotiation leads them to the conclusion that "[n]egotiation research is empirically based and descriptively rich, but often suffers from lack of formal prescriptive methods").

²³ See, e.g., Nigel Nicholson, How Hardwired Is Human Behavior?, 76 HARV. BUS. REV., July-Aug. 1998, at 135, 135-36 (noting the need to understand evolutionary psychology because it provides a "new and provocative way to think about human nature"). Professor Bazerman says that heuristics are "embedded in the way the human mind works." See Max H. Bazerman & James J. Gillespie, Betting on the Future: The Virtues of Contingent Contracts, 77 HARV. BUS. REV., Sept.-Oct. 1999, at 155, 157.

emotions which appear to arise from survival needs²⁵—carrying both positive²⁶ and negative²⁷ implications. The survival benefits of decision heuristics seem fairly obvious. To pick an example, no doubt, repeated throughout history: If one sees another person die after being bitten by a poisonous snake, one quickly and vividly learns to hesitate when picking up snakes, especially any that bear a close resemblance to the one that killed the neighbor. Needless to say, having the ability to absorb lessons such as this quickly carries substantial life-saving benefits—reacting immediately at the sight of a dangerous reptile substantially increases one's survival odds. Social psychologists describe this strong reaction as an example of the "availability" heuristic.²⁸ That is, rather than treat each new encounter with a

The thousands and thousands of genes that influence human behavior—genes that build the brain and govern neurotransmitters and other hormones, thus defining our "mental organs"—are here for a reason. And the reason is that they goaded our ancestors into getting their genes into the next generation. If the theory of natural selection is correct, then essentially everything about the human mind should be intelligible in these terms. The basic ways we feel about each other... and say to each other, are with us today by virtue of the past contributions to genetic fitness.

ROBERT WRIGHT, THE MORAL ANIMAL: THE NEW SCIENCE OF EVOLUTIONARY PSYCHOLOGY 28 (1994); see also STEVE JONES, DARWIN'S GHOST: THE ORIGIN OF THE SPECIES UPDATED 145 (2000) ("Can habits or instincts, intricate and flexible as they may be, follow the same evolutionary rules as color, shape or size? That might seem unlikely, for behavior is often learned or comes from a simple reflex. In the end, though, every action of every animal is a product of genes..."); GEORGE C. WILLIAMS, THE PONY FISH'S GLOW 162 (1997) (noting that evolution explains the development of human thought and decision patterns, and that "[r]easoning, to be favored by [natural] selection, must lead to useful conclusions that help us survive and reproduce. It need not lead to formally correct solutions to logical problems."); Jones, supra note 10, at 1143 ("[A]II theories of behavior are ultimately theories about the human brain. And we now know that the form and function of the human brain ... have been significantly influenced by powerful, omnipresent, evolutionary processes, including natural and sexual selection, whose important roles in influencing human behavior remain unappreciated.").

- ²⁵ See Robert S. Adler et al., *Emotions in Negotiation: How to Manage Fear and Anger*, 14 NEGOT. J. 161, 163–65 (1998) (noting the evolutionary basis of emotions).
- ²⁶ Id. (stating that emotions such as fear trigger life-saving escape mechanisms; anger motivates us to retaliate when we are attacked or to attack when our interests are threatened).
- ²⁷ Id. at 168 (noting that fear can reduce one to paralysis and anger can flash white hot at inappropriate moments, leading to regrettable actions).
- ²⁸ See BAZERMAN, supra note 16, at 6-7 (the availability heuristic means that "[a]n event that evokes emotions and is vivid, easily imagined, and specific will be more 'available' from memory than will an event that is unemotional in nature, bland, difficult

²⁴ Robert Wright argues that the way humans reason, feel, and make decisions stems from evolution's broad imprint:

snake as a unique event, humans instinctively rely on the immediate, vivid image that arises in their minds to guide their reaction to the serpent.²⁹ One's reaction may also be based on past observations or on stories related by other members of one's group. Of course, as with most heuristics, it sometimes leads us astray. A starving person encountering a brightly colored, non-poisonous snake might mistake it for a lethal variety and unnecessarily flee the scene, thus losing an opportunity for a meal.³⁰ Most of the heuristics of concern to negotiators carry much less emotional impact than the snake example, but they all seem fundamentally to reside deep within human instincts.³¹

B. Benefits of Heuristics

Although much of the discussion within this article focuses on the way that heuristics lead us astray, one must remember that, most of the time, they play a positive role in our lives.³² For example, heuristics that predispose people to sense danger even when little risk may actually exist are clearly survival oriented and much preferred over those that operate in the opposite

to imagine, or vague"); see also infra notes 57-58 and accompanying text (discussion of availability heuristic).

²⁹ When it comes to ancient dangers like snakes, heights, lightning, and fire, humans may be particularly predisposed by evolution to acquire fears, sometimes leading to phobias. See Martin E.P. Seligman, On the Generality of the Laws of Learning, 77 PSYCHOL. REV. 406, 414–16 (1970); see also Martin E.P. Seligman, Phobias and Preparedness, 2 BEHAV. THERAPY 307 (1971).

³⁰ See WRIGHT, supra note 24, at 263 (noting that evolution can sometimes employ deception as when "harmless snakes have evolved the coloration of poisonous snakes, gaining undeserved respect").

³¹ One might argue that a person's reaction to a poisonous snake produces more of an emotional than a cognitive reaction. Clearly, it presents both, with the dividing line between the two not always clear. *See, e.g.*, ROBBINS, *supra* note 16, at 110 (arguing that "[p]eople use emotions as well as rational and intuitive processes in making decisions. Failure to incorporate emotions into a study of decision processes will result in an incomplete (and often inaccurate) view of the process.").

³² See, e.g., BAZERMAN, supra note 16, at 6 (noting the usefulness of heuristics); Jolls et al., supra note 7, at 1477 (noting that "heuristics are useful on average (which explains how they become adopted)"); Jeffrey J. Rachlinski, The "New" Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters, 85 CORNELL L. REV. 739, 753 (2000) (noting the general usefulness of heuristics and arguing that, in the legal context, "many of the [decision heuristics] are quite adaptive. If these phenomena are mental shortcuts that serve people well, or even enhance their well-being, then crafting legal rules that induce people to avoid them could do more harm than good.").

direction.³³ This seems particularly so where the precise degree of risk is uncertain and prudence poses no great risk. Of course, not all "prudent" measures pose less risk. For example, one who drives across country to avoid the risks of air travel clearly places himself or herself in greater danger by driving rather than flying.³⁴ The extensive fear that Americans felt about flying after the terrorist attacks against the World Trade Center and Pentagon on September 11, 2001, obscured the fact that most people who died in that tragic incident did so while working in their offices, not while sitting in a plane. Yet, it seems fair to say that, in the aftermath, few people suffered the same anxiety about sitting at their desks as they did about flying.

Perhaps the most accurate view of heuristics is that, most of the time, they provide substantial advantage to humans even though they occasionally lead us into error.³⁵ For example, the "availability" heuristic, which directs us to follow the most immediately workable alternative, undoubtedly reflects

You and I exist in an extraordinarily complicated stimulus environment, easily the most rapidly moving and complex that has ever existed on this planet. To deal with it, we need shortcuts. We can't be expected to recognize and analyze all the aspects in each person, event, and situation we encounter in even one day. We haven't the time, energy, or capacity for it Sometimes the behavior that unrolls will not be appropriate for the situation, because not even the best stereotypes and trigger features work every time. But we accept their imperfection, since there is really no other choice. Without them, we would stand frozen—cataloging, appraising, and calibrating—as the time for action sped by and away.

CIALDINI, *supra* note 12, at 7. The wisdom of seeking consistently good results rather than occasional best results has been explicitly adopted by researchers in artificial intelligence. Through an approach known as "heuristic programming," they develop programs that usually produce a good result, but not always the best result. *See, e.g.*, *Heuristic*Programming, Webopedia, at http://webopedia.internet.com/TERM/H/heuristic_programming.html (last modified Apr. 12, 1997) (last visited Feb. 10, 2005).

³³ Moreover, although it seems indisputable that heuristics can mislead, one need always to examine criticisms based on heuristics as critically as one examines the heuristics themselves. This seems particularly important in policy debates. For example, those who would premise government policies on the fact that people invariably err because they fall prey to well-known heuristics need to do more than simply establish the existence of the heuristic. They need to demonstrate that the heuristic applies, that it leads to error, and that their prescriptions would be superior to current practices. *See infra* notes 271–73 and accompanying text.

³⁴ See, e.g., ROBBINS, supra note 16, at 139 (noting that, "if flying on a commercial airline was as dangerous as driving, the equivalent of two 747s filled to capacity would have to crash every week, killing all aboard, to match the risk of being killed in a car accident").

³⁵ As Cialdini notes, we need heuristics simply to live as human beings:

the fact that life-and-death evolutionary demands rewarded speedy decisionmaking more than perfect judgment.

Because of life's complexities, evolution may have hard-wired us in ways that predispose us to make non-rational decisions under certain circumstances. Non-rational approaches, however, can sometimes carry benefits. For example, a number of studies demonstrate that people seem predisposed to approach negotiations with an unreasonably optimistic attitude. Yet, as Professor Rachlinski notes, optimism often carries significant benefits in the business world³⁷ even though it may interfere with an accurate assessment of some situations. ³⁸

C. When Good Heuristics Go Bad

Exactly how do we become so misled by heuristics? Perhaps the best answer is that heuristics provide good general guidance, but sometimes fall short in reading specific situations, drawing lines, or recognizing exceptions.³⁹ For example, the genetic programming that properly alerts us to be on guard around strangers—who, after all, might bear us ill will—may unreasonably lead us to mistrust negotiation partners whom we do not know

³⁶ See, e.g., BAZERMAN, supra note 16, at 32; Birke & Fox, supra note 7, at 16 (noting that negotiators often carry "positive illusions'... which include unrealistic optimism, exaggerated perceptions of personal control, and inflated positive views of the self'); Bernard Roshco, Investor Illiteracy, AM. PROSPECT, Mar.—Apr. 1999, at 70, available at LEXIS, News Library, AmPros File (noting the irrational expectations of investors during the bull market of the 1990s); see also infra notes 160–73 and accompanying text.

³⁷ See Rachlinski, supra note 32, at 759–60 (arguing that over-optimism "leads people to undertake the kind of risky, high-yield ventures that a company must endure in order to be successful. In fact, an excess of optimism may be an essential characteristic of a successful businessperson.").

³⁸ But see infra note 159 and accompanying text (citing Professor Bazerman's critique of this illusory optimism, arguing that it often leads to unintended and negative consequences).

³⁹ Professor Rachlinski looks at the array of biases associated with heuristics and finds three observations about human judgment that he suggests can explain the majority of errors in judgment and decisionmaking:

⁽¹⁾ people rely on attention and memory as if both are limitless and infallible, even though they are neither; (2) the brain makes many automatic inferences outside of the range of conscious thought; and (3) people rely on fixed reference points to evaluate choices, paying more attention to changes in the status quo than to absolute values.

See Rachlinski, supra note 32, at 740.

well, even when they present us with perfectly reasonable proposals.⁴⁰ Similarly, the predisposition that we carry of "fight or flight" in moments of extreme stress often operates even though neither response may be appropriate.⁴¹ This should come as no surprise if one reflects on the fact that our decisionmaking capabilities evolved many years ago and have not changed appreciably in millennia.⁴²

Given evolution's role, Professor Owen Jones argues that it is misleading to characterize the occasional sub-optimal performance of our brains as "defective" or irrational. What occurs instead is that we behave exactly as evolution designed us and that the original design has served us well.

My argument here is that the traditional approach to bounded rationality and decision-making is, in many cases, both descriptively wrong and materially misleading. It is descriptively wrong in the same way that it would be wrong to say that a Porsche Boxster is "defective" when it fails to climb logs and ford streams off road, or that a moth's brain is "defective" when the moth flies into an artificial light source. It is materially misleading because to the extent that irrationalities are considered to be the result of defects, rather than design features, their specific content is assumed to be, though patterned *ex post*, unpredictable, unsystematized, and random *ex ante*—rather than predictable, interrelated, and content-specific.

The consequence of this ... is that we not only should allow for, but should indeed expect, that there will be times when a perfectly functioning brain—functioning precisely as it was designed to function—will incline us toward behavior that, viewed only in the present tense and measured only by outcomes in current environments, will appear to be substantively irrational. This is simply because the brain was designed to process information in ways tending to yield behaviors that were substantively

⁴⁰ Thus, one might feel that he or she is negotiating fairly and sincerely, but unreasonably insist that one's opponent is bargaining aggressively and competitively. In many cases, we are improperly externalizing our fears rather than accurately assessing the situation. *See infra* notes 138–39 and accompanying text.

⁴¹ See Adler et al., supra note 25, at 163-65.

⁴² See WILLIAMS, supra note 24, at 148 (observing that "[h]uman nature is now very much what it was in the Stone Age, which lasted more than a hundred times as long as recorded history. Current human nature is designed for Stone Age life."); see also WRIGHT, supra note 24, at 191 (noting that the evolutionary design that produced human nature "was done in a social environment quite different from the current environment. We live in cities and suburbs and watch TV and drink beer, all the while being pushed and pulled by feelings designed to propagate our genes in a small hunter-gatherer population.").

rational in different environments than the ones in which we now find ourselves 43

D. Classifying Negotiation Biases

One of the great challenges of scholarly analysis is classifying the particular phenomenon being studied. Classification is inherently judgmental, since there are numerous ways of organizing information.⁴⁴ Yet, classifications are critical in helping us sort through large amounts of data. One of the major concerns of those who study cognitive bias is the difficulty of organizing what appears to be an almost infinite array of decision errors into a coherent body of knowledge.⁴⁵ To date, no one has developed a taxonomy to which social science researchers universally subscribe.⁴⁶ Most researchers identify several categories, which may include multiple subgroups within the categories.⁴⁷ In most instances, researchers draw a

⁴³ Jones, *supra* note 10, at 1171-72.

⁴⁴ Aristotle, for example, grouped humans and birds together since both walk on two feet. See Gary Olsen, Classifications, at http://www.bact.wisc.edu/MicrotextBook/ClassAndPhylo/classify.html (last visited Nov. 11, 2004).

⁴⁵ See Rachlinski, supra note 32, at 748–49. In addressing what he refers to as "behavioral decision theory," or "BDT," which includes decision bias as a fundamental part of the theory, Professor Rachlinski describes the problem of applying BDT to legal analysis:

BDT's seemingly endless list of cognitive heuristics and biases presents a ... [serious] problem for the application of BDT to law. The prospect of an unlimited number of phenomena that require innumerable constraints or caveats on legal analysis surely deters some legal scholars from incorporating BDT into their analyses. Even worse, if BDT has no limiting principles, then legal scholars can use some part of BDT to support almost any assertion about human behavior. A methodology that creates hidden psychological trump cards that scholars can play to contradict any assertion about human behavior cannot satisfy any legal scholar.

Id.

⁴⁶ While there is no universal taxonomy, virtually all researchers begin with the heuristics identified by Tversky and Kahneman: availability, representativeness, and anchoring and adjustment. *See* Tversky & Kahneman, *supra* note 7, at 1124–30.

⁴⁷ For example, Bazerman identifies three heuristics (availability, representativeness, and anchoring and adjustment) associated with thirteen biases, but also identifies other biases created by "self-serving motivations." See BAZERMAN, supra note 16, at 11–40, 88–104. Robbins identifies two categories of heuristics (availability and representativeness), but also includes a separate bias (escalation of commitment). See ROBBINS, supra note 16, at 139–40. Sunstein draws a distinction between "factual" errors and "probability related 'tastes." See Sunstein et al., supra note 6, at 1153–57. Linda

distinction between the concepts of heuristic and bias. Heuristics are mental "rules of thumb," which are generally useful decision tools that, if misapplied, produce biased decisionmaking. Biases are mental errors that skew reasoning and typically produce sub-optimal outcomes.

I propose to address the various heuristics and biases in a way that makes the most sense to those interested in *negotiation* bias.⁴⁸ The relevance of heuristics and decision biases to negotiation is generally obvious—anything that clouds one's judgment or leads one astray in making a decision can undermine negotiation effectiveness. In fact, because negotiation settings often involve stressful interactions and quick judgments, they are more likely to trigger biased decisionmaking than other social interactions.

To organize the analysis, I propose to divide biases into those that result from illogical or poor thinking (cognitive biases) and those that result from egocentric thinking (egocentric biases). Stating the distinction in a simplified way, the former errors result from failing to reason logically, while the latter result from excessive self-absorption that clouds good judgment.⁴⁹ Of course, it is no solace to any of us that we commit both kinds of errors from time to time.

Beyond these two categories, however, lies a third that defies easy categorization. In it, I have placed a variety of miscellaneous negotiation biases that do not easily fit into either of the categories just named. In some cases, they relate to neither category; in others, they seem to fit within both, but with no logical basis for choosing between the two.⁵⁰

Heath and R. Scott Tindale identify four specific heuristics (representativeness; availability; anchoring and adjustment; and counterfactual thinking and the simulation heuristic) and one general bias category (other heuristics and biases). See Linda Heath & R. Scott Tindale, Heuristics and Biases in Applied Settings: An Introduction, in APPLICATIONS OF HEURISTICS AND BIASES TO SOCIAL ISSUES 1, 1–11 (Linda Heath et al. eds., 1994) [hereinafter APPLICATIONS OF HEURISTICS].

⁴⁸ I say this realizing that sometimes there is not a significant difference between a general decision bias and one that relates specifically to negotiation.

⁴⁹ To oversimplify, one who is stupid, but emotionally stable, is more likely to commit a cognitive error, while one who is smart, but emotionally self-absorbed, is more likely to commit an egocentric error.

⁵⁰ See infra notes 184–254 and accompanying text. Because of the somewhat vague parameters of decision biases, I make no claim to have created a superior classification. What I have done is to offer a reasonably workable approach, realizing that various researchers might take issue both with my categories and with my decisions of placement within categories.

III. COGNITIVE BIASES ASSOCIATED WITH HEURISTICS

As noted, decisionmaking and negotiating would be substantially easier if humans always thought clearly, logically, and intelligently. This, however, is not the case. In many instances, despite careful research and thoughtful planning, humans fall into thought "traps" that result in negative outcomes. Unfortunately, it is difficult at times to learn from our mistakes, because they seem to stem from patterns deeply imbedded in our brains. It is critical, if we are to avoid these pitfalls, to understand how they arise and how they operate. In particular, it is vital to understand how heuristics function and how they can lead us astray.

A. Availability Heuristic

The availability heuristic, first described by Amos Tversky and Daniel Kahneman,⁵¹ organizes and retrieves human memories as a guide to future action.⁵² People use the availability heuristic whenever they take action or reach conclusions about the world based on how easily they can recall or imagine instances of what they are thinking about. This heuristic guarantees that events that are more vividly and emotionally implanted in our minds will leap to our consciousness when we face a decision.⁵³ As stated previously, the survival benefit of the availability heuristic seems clear.⁵⁴ If we are confronted with dangers similar to those previously encountered, the ability to recognize and react to them quickly is valuable. Of course, in the modern world, we use availability more broadly than just as a life-saving mechanism.

⁵¹ See Amos Tversky & Daniel Kahneman, Availability: A Heuristic for Judging Frequency and Probability, 5 Cog. PSYCHOL. 207, 208–31 (1973).

⁵² See also Heath & Tindale, in APPLICATIONS OF HEURISTICS, supra note 47, at 5 ("The availability heuristic involves people's tendencies to judge the probability of some event by their ability to recall similar events."); Steven Schwartz, Heuristics and Biases in Medical Judgment and Decision Making, in id. at 45, 50 (noting that availability "is a generally accepted rule of thumb because events that are easy to recall are also usually more likely.... [G]enerations of doctors have been told 'When you hear hoofbeats, think of horses, not zebras."); Jolls et al., supra note 7, at 1518 (noting that people's "judgments about probabilities will often be affected by how 'available' other instances of the harm in question are, that is, on how easily such instances come to mind"); Sunstein, supra note 14, at 44 (describing the availability heuristic as the calculation "by which we judge the probability of an event by asking whether an incident of its occurrence readily comes to mind").

⁵³ See, e.g., BAZERMAN, supra note 16, at 6-7.

⁵⁴ See supra notes 23-31 and accompanying text.

Every day, decisions rely on this heuristic as well. If we had to process all potentially relevant information each time we drove our cars or took a walk, we would be frozen in indecision while we processed our voluminous memory databanks. The availability heuristic simplifies the analysis by serving up the most easily retrieved recollection—some resulting from traumatic experiences—as guides for action. For example, if we remember numerous potholes that threaten our tires or recall massive traffic jams that delay our commute, we very well might act to avoid a particular route on our way to work. In the negotiation context, if we remember how dissatisfied we were in our last negotiation when our first offer was immediately accepted, strongly suggesting that the offer was too low, we might quietly determine to make our first offer more aggressive next time.⁵⁵

The availability heuristic operates virtually every time we invoke memory to make a decision. Its ubiquity, alas, does not guarantee its infallibility. To the contrary, the vividness of a recollection may be skewed by an aberrational personal experience or by sensational media coverage of a rare event, leading one to take extraordinary care in addressing a minor risk or, where no such vivid imprint exists, adopting an unnecessarily casual approach to a serious risk.⁵⁶

In a strict sense, one should not describe the errors associated with the availability heuristic as always irrational (although sometimes they are); rather, they may miss the mark through "GIGO" (garbage in, garbage out) reasoning. Poor information implanted can result in poor information retrieved ⁵⁷

⁵⁵ Professor Thompson refers to situations in which one's opening offer is immediately accepted as the "winner's curse" because one realizes that he or she could have done better with a more aggressive offer. See THOMPSON, supra note 1, at 10.

⁵⁶ The implications of the availability heuristic for policymakers are substantial. In some cases, they may be prodded to regulate insignificant risks, and in others they may face apathy in promoting public health measures. *See, e.g.*, Jolls et al., *supra* note 7, at 1519. According to the authors:

The availability heuristic can lead to under—as well as over—regulation. People sometimes (although not always) underestimate the likelihood of low-probability or low-salience events because these threats simply do not make it onto people's "radar screens"; many health and environmental risks (such as the health threats from poor diet and exercise) may fit this description with some parts of the population. But when a particular threat, even an unlikely one, becomes available, as when, for example, asbestos is discovered in schools, then regulation will be demanded.

Id.

 $^{^{57}}$ Jolls et al. argue that the availability heuristic does not operate irrationally—it simply processes available information, which may be inaccurate. *Id.* at 1518 (arguing

One should be particularly alert to the availability heuristic as a confound in negotiation. An opponent who refuses to consider a truly generous offer may do so because he or she has had a bad memory triggered that creates unreasonably negative feelings towards the offer. Things as trivial as using a particular facial expression or phrasing words in a particular way might remind an opponent of a previous bad experience in such a way that he or she refuses to bargain further to reach a deal.⁵⁸

1. Biased Reasoning

In recent years, numerous researchers have pointed out the biased reasoning that can result from the misapplication of the availability heuristic. For example, they have reported that this heuristic has resulted in the "pollutant of the month" syndrome, where regulation is driven by recent and memorable instances of harm, ⁵⁹ in overestimates by genetic counselors of the likelihood of genetic abnormalities, ⁶⁰ in overestimates of disease frequency by doctors depending on whether they had recently treated a similar case (or had read about it in a recent medical journal), ⁶¹ in public opposition to sterile drug needle exchanges based on the mistaken assumption that such programs do not reduce the incidence of AIDS, ⁶² and many other biased judgments. ⁶³

2. Recall Errors

One of the specific biases associated with the availability heuristic pertains to ease of recall. That is, the easier something is to recall, the more likely that people will include it in their decisionmaking. This often makes sense, but does not when the event involved is vivid, but rare. For example, when asked whether motor vehicle accidents or stomach cancer cause more

that "[r]eliance on how 'available' instances of the event in question are is a form of judgment error, but the error is fully rational—in the sense of reflecting optimizing behavior—for people with limited information").

⁵⁸ To cite a personal experience, the author had a colleague who terminated a negotiation because the representative from the other side kept touching her shoulder during the session, reminding her of a sexual assault that she had suffered a decade ago.

⁵⁹ See Sunstein, supra note 7, at 1188.

⁶⁰ See generally Shoshana Shiloh, Heuristics and Biases in Health Decision Making, in APPLICATIONS OF HEURISTICS, supra note 47, at 13.

⁶¹ See Schwartz, supra note 52, at 50-51.

⁶² See Robyn M. Dawes, AIDS, Sterile Needles, and Ethnocentrism, in APPLICATIONS OF HEURISTICS, supra note 47, at 31, 31-35.

⁶³ See generally APPLICATIONS OF HEURISTICS, supra note 47.

deaths per year, most respondents reply motor vehicles. Yet, stomach cancer kills at roughly twice the rate of motor vehicle accidents.⁶⁴ What skews most people's thinking in this case is that the media constantly report motor vehicle accidents and deaths, but rarely do so for stomach cancer.⁶⁵ Consequently, automobile fatalities will be much more vivid in the public's mind and, therefore, much more likely to be recalled when estimating frequency of occurrence.

On the other hand, many citizens dismissed the risk of AIDS when they thought of it as only a disease of gay men. When Magic Johnson, a popular heterosexual sports figure, contracted the disease, however, popular attitudes changed dramatically.⁶⁶ Whether the change in attitudes accurately reflected the risk of AIDS is, of course, an empirical one and not easily answered.⁶⁷ For a variety of reasons, the media tends to highlight the risks of the disease and to minimize coverage of any good news about infection rates.⁶⁸

⁶⁴ See BAZERMAN, supra note 16, at 14.

⁶⁵ This is not surprising, given the media's predisposition to focus on dramatic stories that often do not reflect common occurrences. See David Noack, Press Criticizes Itself, 132 EDITOR & PUBLISHER, Apr. 10, 1999, at 14, 14 (reporting a Pew Research Center survey of 552 top executives, mid-level editors and producers, and working reporters from national and local news operations, showing that, as a whole, they believe there is too much sensationalism in the media).

⁶⁶ See, e.g., Jay Mathews, Surge in AIDS Tests Drying Up Budgets; Increase Attributed to Magic Johnson, WASH. POST, Dec. 22, 1991, at A3 (reporting that "[a] nationwide surge of requests for the AIDS virus test since basketball star Earvin 'Magic' Johnson revealed that he tested positive has so drained federal AIDS funds that officials at many clinics say they will have no money to test people after January").

⁶⁷ See Joel Schwartz & David Murray, AIDS and the Media, 125 PUB. INT. 57, 57 (1996). Schwartz and Murray claim that:

A twofold lesson about science and the media emerges from a reading of the scientific and popular literature about AIDS: It's not just that the media can, at times, misinform us about what science says; it's also that science often speaks in an extremely qualified and hesitant manner. Not only is the AIDS epidemic extraordinarily difficult to measure, but measurements have often been reported in misleading ways. Thus the media have not conveyed the whole truth about AIDS. But it may not be possible to arrive at that whole truth.

Id.

⁶⁸ Id. at 61-62 (noting that the media have generally ignored dropping AIDS infection rates in the United States perhaps "because it was thought indecorous to appear to foster complacency regarding a disease expected to kill all its victims"; and observing that "a familiar song from World War II urged Americans to 'accentuate the positive, eliminate the negative'; ... our most influential news organs have often done just the opposite").

One clear lesson from the Magic Johnson story is that celebrities often command extensive media and public attention, greatly increasing the ease of recall of incidents in which they are involved, but also the potential for significant overestimation about the risk of specific tragedies. For example, when celebrities Michael Kennedy and Sonny Bono died in similar ski accidents within a week of each other, many people, based only on these two reports, concluded that skiing was an extremely dangerous sport.⁶⁹

3. "False Consensus" Effect

Another bias associated with the availability heuristic is the so-called "false consensus" effect. As Professor Leigh Thompson explains, this effect "refers to the fact that most people think that others agree with them more than is actually warranted." For example, smokers estimate that a much higher percentage of the population smokes than do nonsmokers. Similarly, this exaggerated notion of strong social agreement carries over into attitudes regarding drugs, abortion, seatbelt use, and politics. In many cases, these attitudes reflect only that one associates with those who share common views; in others, they only reflect that one notices those who agree with him or her and ignore those who disagree.

B. Representativeness Heuristic

Another one of the three heuristics originally identified by Tversky and Kahneman is representativeness.⁷³ This heuristic applies when people make judgments about persons or events based on the similarities that they have with previous persons or events in their experience.⁷⁴ That is, if a person or thing appears similar to members of a known category, we assume that they belong in that category (and that the category is homogeneous). The benefits

⁶⁹ See ROBBINS, supra note 16, at 124 (noting that, "[a]lthough the two incidents were totally unrelated, their proximity in time led many to perceive the risk from skiing in a new light").

⁷⁰ See THOMPSON, supra note 1, at 170. This effect also arises from people's egocentrism. See infra notes 115-83 and accompanying text.

⁷¹ See THOMPSON, supra note 1, at 170.

⁷² Id.

⁷³ See Tversky & Kahneman, supra note 7, at 1124–27.

⁷⁴ See Heath & Tindale, supra note 47, at 2-3 (defining this heuristic as arising when one "judges the probability of an uncertain event by the degree to which it (1) is similar in essential properties to its parent population, or (2) reflects the salient features of the process by which it is generated").

of this characteristic are obvious—quite similar to availability. Representativeness provides a classification scheme that enables rapid reactions to outside stimuli that can be life-saving. When our ancestors encountered a human stranger or a never-before-seen animal, they needed an instant "friend or foe" judgment. Representativeness provided a quick, albeit not always reliable, response. If the potential threat resembled a known danger, one reacted with caution. Similarly, if the new person resembled a friendly neighbor, or the animal looked like a non-threatening pet, one refrained from attacks or flight.

1. Stereotypes and Illusory Correlations

Perhaps the most common example of the representativeness heuristic is stereotypes. You virtually every group, whether ethnic or professional, produces an image in the public's mind of the type of personality they project and the kind of behavior in which they engage. Stephen Walker and V. Lonnie Lawson, for example, point to a decidedly unscientific poll that, notwithstanding its lack of rigor, seems to capture the public's image of librarians, i.e., that they are quiet, stern, single, stuffy, and wear glasses. Stereotypes, of course, do not spring from sterile soil. Typically, there is an element of truth or insight in the stereotype. The problem arises when people automatically assign specific traits or behavior to individuals based on stereotypes about groups. Although the stereotype may provide helpful presumptive information, one always needs to focus on the specifics of

⁷⁵ See THOMPSON, supra note 1, at 170 (noting that "the more a person looks like the stereotype of a group member, the more we are inclined to stereotype them as belonging to that group").

⁷⁶ See generally DEVON A. MIHESUAH, AMERICAN INDIANS: STEREOTYPES AND REALITIES (1979) (identifying and challenging a variety of stereotypes held about Native Americans).

⁷⁷ See, e.g., Stephen Walker & V. Lonnie Lawson, The Librarian Stereotype and the Movies, 1 MC J.: J. ACAD. MEDIA LIBRARIANSHIP 16 (1993), at http://wings.buffalo.edu/publications/mcjrnl/v1n1/image.html (last visited Feb. 10, 2005) (discussing the various stereotypes about librarians portrayed in the movies).

 $^{^{78}}$ Id. Specifically, they cite a poll of 100 people by the television show "Family Feud."

⁷⁹ Id.

⁸⁰ See, e.g., THOMPSON, supra note 1, at 170 (noting that stereotypes "often have a basis in reality").

individual instances if one is to draw meaningful conclusions about any given person or thing.⁸¹

Negotiators, in particular, need to focus on the benefits and drawbacks of the representativeness heuristic when they bargain with someone from a different culture⁸² or of a different gender.⁸³ To ignore obvious differences could prove fatal to a high-stakes negotiation, but to leap to an automatic reliance on broad stereotypes could prove equally troublesome. In fact, flexibility is the key to avoiding this potential trap.⁸⁴

One of the best explanations for the persistence of stereotypes in the absence of data supporting those beliefs is the so-called "illusory correlation"

Individuals in positions of authority are judged by how they enact [authority for themselves.] This poses a particular challenge for women. The ways women are expected to talk—and many (not all) women do talk—are at odds with images of authority. Women are expected to hedge their beliefs as opinions, to seek opinions and advice from others, to be "polite" in their requests. If a woman talks this way, she is seen as lacking in authority. But if she talks with certainty, makes bold statements of fact rather than hedged statements of opinion, interrupts others, goes on at length, and speaks in a declamatory and aggressive manner, she will be disliked.

DEBORAH TANNEN, TALKING FROM 9 TO 5, at 170 (1994).

During [negotiation] discussions, negotiators should assume differences exist in negotiating styles until similarity is proven. Negotiators can more easily move from an expectation of difference to an acceptance of similarity than can they recoup their losses from mistakes incurred in acting as if negotiators from other cultures bargain just like you do when in fact they do not.

⁸¹ Malice is not necessarily the basis of stereotypes. As Cialdini notes, the culprits more often are limited time, energy and capacity, which undermine our ability to process information. "Instead, we must very often use our stereotypes, our rules of thumb to classify things according to a few key features and then to respond mindlessly when one or another of these trigger features is present." CIALDINI, *supra* note 12, at 7.

⁸² See, e.g., NANCY J. ADLER, INTERNATIONAL DIMENSIONS OF ORGANIZATIONAL BEHAVIOR 208 (4th ed. 2002) ("Do Russians bargain with the same expectations and approaches as Arabs? No. Are Arab negotiating styles similar to those of Americans? Again, no. Russians, Arabs, and Americans negotiate in notably different ways."); see also Mitchell, supra note 6, at 148 (noting that the effect of culture on things such as cognition and reasoning "counsels against the assumption that cognitive processes revealed exclusively through studies of Anglo-American subjects will necessarily be operative in other cultural groups as well").

⁸³ Professor Deborah Tannen, a linguist, has written extensively on the differences in the way men and women manage, talk, and negotiate. In discussing how individuals negotiate authority for themselves, for example, she states:

⁸⁴ See ADLER, supra note 82, at 246. As Professor Nancy Adler advises with respect to international negotiations:

effect. According to research on this effect, people tend to remember facts that fit in with their ideas about groups and to ignore evidence that contradicts their ideas.⁸⁵ This operates in a particularly strong way when the information is vivid, in either a good sense or a bad one. Thus, studies show that people overestimate the number of times they read about timid accountants, wealthy doctors, and talkative salespeople because of their preconceived notions about these professions.⁸⁶

2. "Base Rate" Fallacy

The representativeness heuristic can generate bias in calculating probabilities. Given the frequency with which negotiators rely on probabilities in making points in bargaining sessions, one can see the potential for harm in misreading them. For example, no matter how highly experts in the field rate a specific automobile, a single bad report from a friend or neighbor can sour us on purchasing the car.⁸⁷ Researchers describe such an approach, i.e., basing a decision on the anecdote of one person to the exclusion of a large body of otherwise valid data, as the "base rate fallacy."⁸⁸ A "base rate" is the frequency with which something occurs in the general population. When one extrapolates from one or two data points, ignoring broader and more valid data, one commits this fallacy.⁸⁹ The media have a well-known proclivity in this direction, especially during slow news cycles. For example, during the summer of 2001, stories of unprovoked shark attacks proliferated in the news despite their extremely low rate of occurrence, no

⁸⁵ See, e.g., Loren J. Chapmen, Illusory Correlation in Observational Report, 6 J. VERB. LEARN. & VERB. BEHAV. 151, 151–55 (1967); David L. Hamilton & Robert K. Gifford, Illusory Correlation in Interpersonal Perception: A Cognitive Basis of Stereotypic Judgments, 12 J. EXPERIMENT. Soc. PSYCHOL. 392, 393–406 (1976).

⁸⁶ See Hamilton & Gifford, supra note 85, at 393, 399–400.

⁸⁷ See THOMPSON, supra note 1, at 170-71,

⁸⁸ Id.; see also BAZERMAN, supra note 16, at 19-20; Heath & Tindale, supra note 47, at 3.

⁸⁹ Of course, there is a difference between ignoring base rate data and discounting such data. Professor Koehler points to recent studies indicating that groups such as juries often do look at base rate data, but accord it less weight than others might for specific normative reasons. See Jonathan J. Koehler, The Base Rate Fallacy Reconsidered: Descriptive, Normative and Methodological Challenges, 19 BEHAV. & BRAIN SCI. 1, 1–3, 13–14 (1996).

doubt leading to excessive caution among the nation's vacationing beachgoers. 90

3. "Halo" and Contrast Effects

Two psychological effects of an ostensibly opposing nature illustrate the reach of the representativeness heuristic. The so-called "halo" effect operates when we extrapolate specific positive (or negative) features to people (or things) based on our general impressions of them.⁹¹ For example, study after study confirms that observers rate physically attractive people positively on numerous dimensions, such as trustworthiness or intelligence, even in the absence of meaningful confirming data.⁹²

Advertisers often use the halo effect to promote sales. One of the most effective ways of doing this is for a company to sponsor an event viewed as promoting a worthy cause. Potential customers will then attribute the good image of the event to the sponsor and be more inclined to trust the company and to purchase its products or services.⁹³

One particular hazard of the halo effect for negotiators is that it operates most forcefully when we enter into settings where we have limited experience or knowledge, in effect providing false assurance where data is lacking.⁹⁴ This can easily lead to premature judgments about the trustworthiness and reliability, or lack thereof, of one's negotiation opponent.

The flip side of the halo effect is what social scientists refer to as the "contrast" effect. Where the halo effect leads to attitudes consistent with our

⁹⁰ See, e.g., David S. Fallis & Christina A. Samuels, Boy, 10, Dies After Shark Attack in Virginia Beach, WASH. POST, Sept. 3, 2001, at A1 (noting that, despite news of a young swimmer being killed by a shark attack, the odds of a shark attack in mid-Atlantic waters are "extremely rare"); John Allen Paulos, How To Find a Trend When None Exists, N.Y. TIMES, Aug. 25, 2001, at A15 (stating that the "actual chances of a shark attack are tiny. August being a perennially slow news month, news reports [of shark attacks] proliferate without any substantive competitors, and they make the world seem much scarier than it is.").

⁹¹ See, e.g., ROBBINS, supra note 16, at 127 (noting that the halo effect operates when "we draw a general impression about an individual on the basis of a single characteristic, such as intelligence, sociability, or appearance").

⁹² See, e.g., CIALDINI, supra note 12, at 171–72 ("A halo effect occurs when one positive characteristic of a person dominates the way that person is viewed by others. And the evidence is now clear that physical attractiveness is often such a characteristic.").

⁹³ See, e.g., Janis Mara, *The Halo Effect*, 41 ADWEEK, May 22, 2000, at 88, 90, 92 (describing numerous instances of "good by association" promotional campaigns).

⁹⁴ See ROBBINS, supra note 16, at 128.

general impressions, the contrast effect leads to exaggerated notions of differences based on recent impressions we have of people or experiences. That is, we tend to see people or things as *more* different than they actually are if we encounter differences close in time or vividness. ⁹⁵ For example, if we lift a light object before lifting a heavy object, we will estimate the second object to be heavier than we would have had we lifted it without first lifting the light object. ⁹⁶ In a similar experiment, subjects who placed one hand in hot water and the other in cold water were then instructed to place both hands in a bucket of lukewarm water. Strangely, the subjects reported that the hand that had been in cold water suddenly felt as though it had been placed in hot water and vice-versa. ⁹⁷

Unfortunately, the contrast effect can be used to great advantage by sales agents and negotiation opponents. Consider that retailers invariably seek to peddle expensive items first and then move the customers to lesser items (often overpriced) as part of a sales pitch. The marketers know that, rather than showing reluctance to make additional purchases after spending a huge sum on the first item, customers will often be more willing to make additional purchases because the next items, even expensive ones, will seem cheap compared to the first purchase.⁹⁸ This same psychology obviously operates in many bargaining situations.

4. Gambler's Fallacy

Another bias associated with the representativeness heuristic is the so-called "gambler's fallacy." Very simply, this bias occurs when a person assumes that what occurs on average will take place next or immediately, or that which occurs in the long term will be "corrected" in the short term. The simplest illustration is tossing a coin. If one takes an evenly balanced coin and flips it many times, one can reliably predict that it will land on heads roughly half the time and tails half the time. Yet, one who predicts that a coin that landed on heads the last five times will land on tails the next time because tails is "due" commits the gambler's fallacy. In fact, the previous

⁹⁵ See, e.g., id. (noting that "[o]ur reaction to one person is influenced by other persons we have recently encountered"); Brett A. Boyle et al., *Points of Reference and Individual Differences as Sources of Bias in Ethical Judgments*, 17 J. Bus. Ethics 517, 518 (1998) (The contrast effect "occurs when prior evaluations accentuate perceived differences between current and previous stimuli.").

⁹⁶ See CIALDINI, supra note 12, at 11–12.

⁹⁷ *Id*. at 12.

⁹⁸ Id. at 13.

tosses have no relevance at all to the sixth toss. The odds remain 50/50.⁹⁹ The only relevance of the previous tosses would be that one could reasonably conclude that it would be unlikely that flipping the coin another five times would yield another five straight heads.¹⁰⁰

5. Regression to the Mean

A final example of the representativeness heuristic is regression to the mean. This is a statistical phenomenon that occurs when one takes a non-random sample from a population and attempts to replicate it. For example, assume that a high school student takes the Scholastic Aptitude Test (SAT) and achieves a score of 750 on the quantitative part of the test. What are the odds that he or she will repeat this score or score higher on the exam? Although making a specific prediction about an individual student requires specialized knowledge, one can predict that *most* students who repeat the SAT will receive a lower score. The reason is that most students score in the middle of the range of possible scores and the more one exceeds the average, the more likely it is that one will tend to return to an average performance. ¹⁰¹

C. Anchoring Heuristic

A third heuristic identified by Kahneman and Tversky is "anchoring." 102 This heuristic draws upon the availability heuristic. When people are presented with a possible answer and then given an opportunity to reach their

⁹⁹ See THOMPSON, supra note 1, at 171.

¹⁰⁰ This would not be due to the past number of coin flips, but rather the low odds of such an outcome.

¹⁰¹ See, e.g., BAZERMAN, supra note 16, at 23, 25. Noting that Kahneman and Tversky suggest that the representativeness heuristic explains the counterintuitive nature of the concept of regression to the mean, Bazerman writes:

Many effects regress to the mean. Brilliant students frequently have less successful siblings. Short parents tend to have taller children. Great rookies have mediocre second years (the "sophomore jinx"). Firms that have outstanding profits one year tend to have lesser performances the next year. In each case, individuals are often surprised when made aware of these predictable patterns of regression to the mean.

Id. at 25.

¹⁰² See Tversky & Kahneman, supra note 7, at 1128 (referring to the phenomenon as "anchoring and adjustment"); see also BAZERMAN, supra note 16, at 27–30; THOMPSON, supra note 1, at 171; Bazerman et al., supra note 7, at 1288; Ann Bostrom, Risk Perceptions: "Experts" vs. "Lay People", 8 DUKE ENVTL. L. & POL'Y F. 101, 107 (1997); Heath & Tindale, supra note 47, at 6–7.

own answer, their answer tends to be close to the answer they were previously shown—irrespective of any relevance of the initial answer. In a famous experiment by Tversky and Kahneman, subjects were asked to give an estimate of the percentage of African countries in the United Nations (UN). Before making their estimates, subjects watched as experimenters spun a giant wheel which they believed generated random numbers between 1 and 100 (actually the wheel was rigged to stop at 10 half of the time and 65 half of the time). After they saw the "random" number, subjects were asked if they thought the actual percentage of African Countries was higher or lower. They were then asked to give their own estimate. Interestingly, subjects who saw the number 10 estimated the percentage of African nations in the UN to be 25%, on average, and subjects who saw the number 65 estimated it to be 45%. Even though they thought the numbers were random and had nothing to do with the question, subjects were evidently still influenced by seeing the numbers. As Tversky and Kahneman observed, the subjects "anchored" their estimates to the provided numbers. 103 Providing a number through the spinning wheel made it available, 104 thus estimates tended to cluster around

Negotiators particularly need to know about and appreciate the anchoring phenomenon. When negotiators bargain about the price of an item, they need to be wary of first offers advanced by their opponents¹⁰⁵ who may use these offers to "anchor" the negotiation around their number, thus subtly limiting the range of bargaining.¹⁰⁶ Anchoring operates especially well when there

¹⁰³ See Tversky & Kahneman, supra note 7, at 1128.

¹⁰⁴ *Id.* Thus, the reference to the availability heuristic.

¹⁰⁵ Of course, there is a tremendous downside potential to making first offers, leading most negotiation experts to advise against doing so. See, e.g., CHARLES B. CRAVER, EFFECTIVE LEGAL NEGOTIATION AND SETTLEMENT 57 (2d ed. 1993) (noting that "most negotiators prefer to have [their adversaries] articulate their opening positions first"); ROGER DAWSON, SECRETS OF POWER NEGOTIATING 57 (2d ed. 1995) (describing pricing techniques under a "Higher Authority Gambit"); SCHOONMAKER, supra note 3, at 74 (advising negotiators to "[t]ry to get [the other side] to make the first offer"); SHELL, supra note 1, at 157, 159 (noting that, while he disagrees, "many experts say you should never open"). Those who make the first offer, the experts argue, too often make themselves vulnerable by demonstrating ignorance, by making offers meant to be rejected that instead are immediately accepted, by seeking unduly modest agreements, or, conversely, by demanding insultingly large amounts.

¹⁰⁶ See, e.g., SHELL, supra note 1, at 159 (noting that the negotiator who makes the first offer has the chance "to set the zone of realistic expectations for the deal"); David B. Falk, The Art of Contract Negotiation, 3 MARQ. SPORTS L.J. 1, 22–23 (1992) (stating that first offers set the market); Peter Robinson, Contending With Wolves in Sheep's Clothing: A Cautiously Cooperative Approach to Mediation Advocacy, 50 BAYLOR L. REV. 963,

are few market indicators¹⁰⁷ to help establish an appropriate price or where one has little relevant experience or knowledge.¹⁰⁸ Unfortunately, even when one brings considerable experience to the table, he or she can still fall prey to anchoring.¹⁰⁹

Anchoring occurs not just with numbers. Negotiators also need to worry generally about "impression management" from their opponents. Research suggests that "parties typically establish the entire tone of a negotiation through the first array of moves and gestures." Thus, the first impression that one projects in a negotiation will often carry through the entire bargaining sequence. Psychology professor Solomon Asch describes this

980 n.100 (1998) (stating that "[t]here are times when a negotiator seizes a strategic advantage by making the first opening offer").

107 For example, a person offering to sell a one-of-a-kind dress formerly owned by a celebrity might lead with a very high figure, knowing that there may be few reference or comparison points to consult in valuing the dress. Further, its value to a fan of the celebrity is likely to be emotionally, rather than financially, based.

108 See Birke & Fox, supra note 7, at 10 (noting that "[p]eople are especially susceptible to anchoring bias when they have little relevant experience or knowledge"); Gregory B. Northcraft & Margaret Neale, Experts, Amateurs, and Real Estate: An Anchoring-and-Adjustment Perspective on Property Pricing Decisions, 39 ORG. BEHAV. & HUM. DECISION PROCESSES 84 (1987) (also noting susceptibility to the anchoring bias).

109 See BAZERMAN, supra note 16, at 29 (noting that "even experts are susceptible to the anchoring bias"); Birke & Fox, supra note 7, at 10 (citing studies that demonstrate that "expertise alone fails to provide protection from [anchoring bias]"); Northcraft & Neale, supra note 108, at 94–96 (also noting that expertise alone does not provide protection from anchoring bias).

110 See Robert S. Adler & Elliot M. Silverstein, When David Meets Goliath: Dealing with Power Differentials in Negotiations, 5 HARV. NEGOT. L. REV. 1, 81 and citations listed therein (2000); see also Jeffrey Z. Rubin & Bert R. Brown, The Social Psychology of Bargaining and Negotiation 262–63 (1975) (noting that, during the early moments of a negotiation, the moves and gestures of the bargainers "convey information about each party's initial preferences, intentions, and perceptions, and are instrumental in shaping the psychological climate that will prevail throughout the bargaining relationship").

111 See BAZERMAN, supra note 16, at 29 (stating, with respect to the anchoring effect, that "[w]e have all fallen victim to the first-impression syndrome when meeting someone for the first time. We often place so much emphasis on first impressions that we do not adjust our opinion appropriately at a later date."); see also Adler & Silverstein, supra note 110, at 81 (noting that "first impressions matter").

112 In fact, research suggests that, even when one's first impression is proven to be incorrect, he or she will continue to believe it. This so-called "perseverance effect" is quite difficult to change. *See, e.g.*, THOMPSON, *supra* note 1, at 172 (noting that, "[i]f you or your negotiation opponent has an erroneous belief about the other, even when it is proven wrong, the belief may still prevail").

as the "primacy effect," and it means that negotiators involved in high stakes deals need to be concerned from the very start of a negotiation about how they come across to the other side. At a minimum, negotiators need to present an image of strength and confidence. This does not necessarily mean that one needs to attack or display hostility. It does mean, however, that one should present an image indicating that one is prepared for all eventualities and that one is able to cope with the pressures of bargaining.

IV. EGOCENTRIC BIAS

For quite understandable reasons, people focus on matters that concern themselves, often to the exclusion of others. As with other human traits, this can be explained, at least in part, by evolution. Without a healthy devotion to one's self-interest, one is unlikely to survive for long. Sometimes, unfortunately, our built-in absorption with ourselves produces a world view that is biased because it neglects the reality outside of ourselves. When that occurs, we find ourselves misled about others' motives, thoughts, and plans. Our drive to pursue our own agendas leads us to view those who stand as obstacles as uncaring or evil. This is especially so in negotiations, which

¹¹³ See S.E. Asch, Forming Impressions on Personality, 41 J. ABNORMAL & SOC. PSYCHOL. 258, 258–59, 271–72 (1946) (one of the first researchers of the primacy effect citing research that those traits of a person that observers first learned about influenced their ratings of the person more than traits they learned about later); see also WYNAND PIENAAR & MANIE SPOELSTRA, NEGOTIATION: THEORIES, STRATEGIES & SKILLS 52–53 (1991) (citing studies on how the primacy effect, i.e., the "effect of first impression," critically affects later interactions).

¹¹⁴ See Adler & Silverstein, supra note 110, at 82.

¹¹⁵ Of course, devotion to one's own interests exclusively would mean that no one would ever worry about or sacrifice for others such as family, friends, or community, something we know not to be the case. Evolution has hard-wired us to be both selfish and selfless. See JAMES Q. WILSON, THE MORAL SENSE 23, 41 (1993) (noting that "the most powerful human disposition is self-preservation"). Wilson also insists that,

[[]i]f Darwin and his followers are right, and I think they are, the moral sense [i.e., to be selfless] must have had adaptive value; if it did not, natural selection would have worked against people who had such useless traits as sympathy, self-control, or a desire for fairness and in favor of those with the opposite tendencies (such as a capacity for ruthless predation, or a preference for immediate gratification, or a disinclination to share).

Id. at 23.

¹¹⁶ Egocentrism does not necessarily result from people's view that they are better than others. It more likely results from the fact that we have more information about ourselves and our needs than those of others.

present a high potential for conflict, high anxiety, and tension. The focus in this section is on egocentric biases and how they skew our thinking about the world—and how we negotiate.

A. Confirmation Traps and Self-Fulfilling Prophecies

When one tests a hypothesis, especially one that he or she wishes to be true, there is a natural instinct to look for evidence that supports it and to ignore that which contradicts it.¹¹⁷ This bias arises from the extraordinary ability that humans have to see logical connections in the world rather than to view life's events as a series of random bits of data. One applauds, for example, when the famous fictional detective Sherlock Holmes sees the connection between a dog's failure to bark and the theft of an expensive race horse.¹¹⁸ This talent for seeing obscure connections serves Holmes and humanity well most of the time. Yet, the very control of events and life that we enjoy because of our connection-drawing skills sometimes entices us to reach unsupported conclusions justified more by our egocentric focus than by objective evidence.

Numerous false beliefs can flourish, often causing great misery, when only confirming evidence is sought. For example, agriculture in the Soviet Union suffered for decades from the insistence of its chief agriculture official, Trofim Lysenko, that wheat and other crops could be conditioned to acquire resistance to cold when, in fact, the crops carried no such genetic

¹¹⁷ As songwriter Paul Simon describes it, "a man hears what he wants to hear and disregards the rest." Paul Simon & Art Garfunkel, *The Boxer*, on BRIDGE OVER TROUBLED WATER (Columbia Records 1969), re-released on SIMON AND GARFUNKEL'S GREATEST HITS (Columbia Records 1972). World-renowned astronomer Carl Sagan refers to this as this as "observational selection." See CARL SAGAN, THE DEMONHAUNTED WORLD: SCIENCE AS A CANDLE IN THE DARK 213–14 (1996) (describing "observational selection, also called the enumeration of favorable circumstances, or as the philosopher Francis Bacon described it, counting the hits and forgetting the misses"); see also BAZERMAN, supra note 16, at 35–36 (noting that "[m]ost of us seek confirmatory evidence and exclude the search for disconfirming information from our decision processes"); THOMPSON, supra note 1, at 180 (noting that "[p]eople have a strong tendency to seek information that confirms what they already know").

¹¹⁸ SIR ARTHUR CONAN DOYLE, SILVER BLAZE (1892), available at http://www.bakerstreet221b.de/canon/4-memo.htm When queried about whether any particular aspect of the horse's theft calls for additional study, Holmes points to the "curious incident of the dog in the nighttime." Inspector Gregory replies that the dog did nothing in the nighttime. Holmes responds, "That was the curious incident." *Id*.

traits.¹¹⁹ Lysenko and his followers looked only to Marxist ideology for confirmation of their hypotheses rather than searching for scientific experiments that might provide contradictory data, one of the great tools of the scientific method.¹²⁰ Needless to say, the human tendency to over-rely on confirming data has not diminished over time.¹²¹

Negotiators can easily fall into the confirmation trap when they blindly insist on their point of view while bargaining. In the midst of debate and discussion, where little time is afforded for reflection and where conceding intellectual points can be a sign of weakness, one can be particularly susceptible to this bias. Compounding the confirmation bias is the trap of self-fulfilling prophecies. If one enters a negotiation with an assumption about his or her opponent's behavior, one is likely to find confirming examples of this behavior even when evidence for it may be skimpy. This can have either a positive or a negative effect. When one's opening impression is favorable, 122 a "Pygmalion" effect will result, 123 leading to

¹¹⁹ See SAGAN, supra note 117, at 261-63 (describing Lysenko's reliance on "philosophically 'correct' genetics, genetics that paid proper obeisance to communist dialectical materialism" rather than on using experimental controls and examining "an immense body of contradictory evidence").

¹²⁰ Id. at 210–12 (arguing for the superiority of the scientific method as a tool for acquiring knowledge). "Always ask whether the hypothesis can be, at least in principle, falsified. Propositions that are untestable, unfalsifiable are not worth much." Id.

¹²¹ To pick a recent example, Professor Roy Baumeister has strongly challenged the view held by counselors, social workers, and teachers all over the country that low self-esteem leads to violent behavior. Despite extensive searching, he could find no empirical data in support of this view. To the contrary, his experiments led him to the conclusion that high self-esteem that is threatened by outside challenges or insults is more likely to be a trigger of violence than low self-esteem. See Roy F. Baumeister, Violent Pride: Do People Turn Violent Because of Self-Hate, or Self-Love?, 284 SCI. AM., Apr. 2001, at 96, 98 (noting that, despite numerous articles citing the "well-known fact" that low self-esteem triggers violent behavior, he and his colleagues were unable to find "any book or paper that offered a formal statement of that theory, let alone empirical evidence to support. Everybody knew it, but nobody had ever proved it.").

¹²² See, e.g., Thomas W. Dougherty et al., Confirming First Impressions in the Employment Interview: A Field Study of Interviewer Behavior, 79 J. APPLIED PSYCHOL. 659, 663–64 (1994) (noting that interviewees' positive first impressions led interviewers to make positive "self-fulfilling prophecies" that led them to gather less information about these applicants and to make efforts to "sell" the company to the interviewees).

¹²³ See generally Nicole M. Kierein & Michael A. Gold, Pygmalion in Work Organizations: A Meta-Analysis, 21 J. ORG. BEHAV. 913 (2000) (discussing a number of empirical studies of the Pygmalion effect, a type of self-fulfilling prophecy). See also ROBBINS, supra note 16, at 130 (stating that the terms "self-fulfilling prophecy or Pygmalion effect have evolved to characterize the fact that people's expectations

easy acceptance and approval¹²⁴; if one's mindset is negative, then the exchange will become unfavorable, often leading to unnecessarily conflict-laden exchanges.¹²⁵

B. Egocentric Interpretations of Fairness

All negotiators crave fairness in their negotiations. When confronted with a settlement that improves their situation but does not meet their sense of fairness, most negotiators will reject the settlement, even though it will leave them worse off than if they accepted it.¹²⁶ Although this challenges

determine their behavior. In other words, if a manager expects big things from his people, they're not likely to let him down. The result then is that the expectations become reality."); Helen Rheem, Effective Leadership: The Pygmalion Effect, 73 HARV. BUS. REV., May-June 1995, at 14, 14 (describing the Pygmalion effect, "a type of self-fulfilling prophecy in which increasing a leader's expectations of subordinates' performance actually improves that performance").

124 See ROBBINS, supra note 16, at 130.

¹²⁵ See, e.g., Taxing News, 28 PSYCHOL. TODAY, May-June 1995, at 13, 13 (citing research by Loyola University Professor Loretta Stalans that taxpayers' beliefs about tax audits have a habit of becoming self-fulfilling prophecies, i.e., taxpayers who expect unfair treatment fail to establish rapport with their auditors, leading to more negative treatment than those who do establish rapport).

126 One of the most compelling demonstrations of this proposition is the so-called "ultimatum game," in which negotiators seek to divide a sum of money. In this game, one side first proposes to divide the money. The proposal need not provide that the division be equal. If the other side accepts, each side gets whatever was proposed. If the other side rejects, neither receives any money. Even though one arguably would always be better off taking a pittance—as opposed to nothing (if there is no agreement)—research suggests that negotiators will often scuttle any gain for either side if they view the other side as taking unfair advantage of the split. The first use of the game was done by a group of experimental psychologists. See Werner Güth et al., An Experimental Analysis of Ultimatum Bargaining, 3 J. ECON. BEHAV. & ORG. 367, 383-84 (1982); see also SHELL, supra note 1, at 61-63; Colin Camerer & Richard H. Thaler, Anomalies: Ultimatums, Dictators and Manners, 9 J. OF ECON. PERSP. 209, 210-11, 216-18 (1995) (noting that people will not accept demeaning offers in ultimatum games even though the offers will provide more financial benefits than no agreement). Professor Owen Jones argues that "spiteful" behavior in the Ultimatum Game, although seemingly irrational to an economist, is perfectly rational from the perspective of evolution:

Evolutionary analysis suggests an explanation [for "spite" in the Ultimatum Game]. We know from game theory that condition-dependent (in this case, retaliatory) spitefulness can be a feature of an evolutionary stable strategy for reaping gains from cooperators, punishing defectors, and encouraging cooperative outcomes. And research suggests there are biological underpinnings to a sense of fairness. It is adaptive to identify cheaters, and to be identified as a non-sucker—

conventional economic notions that stress rational profit-maximizing, substantial empirical research strongly indicates that fairness concerns often outweigh economic gain.¹²⁷

The exquisite attention that most people devote to fairness faces at least two major confounds that can stymie good decisionmaking and effective negotiating. First, there are many situations in which what is fair is highly debatable. Professor Thompson offers a compelling example of this: If three people go out for dinner and one orders a particularly expensive bottle of wine, an appetizer, and a pricey main course, his or her dinner companion who ordered no wine and two inexpensive side dishes might well object to simply splitting the bill. Both might be challenged by a third colleague who is an impoverished graduate student, who insists that the first two cover the cost of the bill because of their greater financial resources. ¹²⁸ In such a case, no obvious "fair" settlement might exist for the three, even though all profess to support an equitable division.

Second, most people unwittingly perceive matters of fairness through their own eyes. That is, we tend to filter what we see and what we think in terms of our self-interest. This tendency produces what researchers describe as a "self-serving" bias, 129 and dramatically affects our perceptions of what is fair. 130 A study in 1979 by Professors David Messick and Keith Sentis

someone not easily exploited. Consequently, the predisposition to act spitefully when being unfairly exploited by a stingy cooperator may be a time-shifted rationality, underpinning seemingly irrational behavior in modern contexts.

Jones, supra note 10, at 1182-83; see also Karl Sigmund et al., The Economics of Fair Play, 286 SCI. Am., Jan. 2002, at 83, 86-87 (noting that, in the Ultimatum Game, "[i]ncurring costs to punish cheapskates can yield profits in the long run").

¹²⁷ See, e.g., Daniel Kahneman et al., Fairness as a Constraint on Profit Seeking: Entitlements in the Market, 76 AM. ECON. REV. 728; see also Sigmund et al., supra note 126, at 84 (stating that "the lesson from the Ultimatum Game and similar experiments is that real people are a cross breed of H. economicus and H. emoticus, a complicated hybrid species that can be ruled as much by emotion as by cold logic and selfishness").

¹²⁸ See THOMPSON, supra note 1, at 54–55.

¹²⁹ See, e.g., Babcock et al., supra note 7, at 1337 (citing various examples of self-serving bias and noting that, "[e]ven when parties have the same information, they will come to different conclusions about what a fair settlement would be and base their predictions... on their own views of what is fair"); Jolls et al., supra note 7, at 1502 (describing various self-serving biases); Sunstein, supra note 7, at 1182–83 (stating that "[p]eople's judgments about fairness are self-serving" and noting that settling cases is made difficult because "self-serving bias—a belief that one deserves more than other people tend to think—affects both parties to a negotiation").

¹³⁰ See, e.g., BAZERMAN, supra note 16, at 99 (noting that "assessments of what is fair are often biased by self-interest"); Leigh Thompson & George Loewenstein, Egocentric Interpretations of Fairness and Interpresonal Conflict, 51 ORG. BEHAV. &

demonstrates this effect. In that study, the professors asked subjects to specify a fair rate of pay when they had worked 10 hours and another person had worked 7 hours, or where they had worked 7 hours and the other person had worked 10 hours. When the subjects were told that they had worked 10 hours and the other participants had worked 7 hours and had been paid \$25, the subjects claimed that they should be paid on average \$35.24 for their 10 hours. When, however, the subjects were told that they had received \$25 for 7 hours of work, they thought that their colleagues who had worked 10 hours should earn only an average of \$30.29—a \$5 difference explainable only by egocentric bias. Clearly, the subjects' views of fairness changed according to which role they assumed.

Similarly, in another study, participants were randomly assigned to roles in a negotiation simulation involving a wage dispute.¹³² Both groups were given identical background information and asked to negotiate an agreement. Prior to entering the negotiation, the groups were asked what they thought a neutral third party would find to be a fair wage. Despite having identical information, each group concluded that the third party would favor their side, a clear illustration of interpreting data in an egocentric manner.¹³³

Why are negotiators so egocentric in making judgments about fairness? Professor Thompson offers this explanation:

People want or prefer more than what they regard as fair (basic hedonism). In short, our preferences are more primary, or immediate, than our social concerns. People are more in touch with their own preferences than with the concerns of others. We have immediate access to our preferences; fairness is a secondary judgment. For this reason, fairness judgments are likely to be tainted by preferences. Because preferences are primary and immediate, they often color a person's evaluation of fairness in a self-serving fashion. In a sense, our preferences act as a self-serving primer on our judgments of fairness. 134

What makes egocentric judgments so hard to monitor or overcome is that we tend to look at the world through our own distorting prisms. Even those

HUM. DECISION PROCESSES 176, 182 (1992) (citing studies that demonstrate that, "when faced with ambiguity, peoples' judgments will be biased in a manner that favors themselves").

¹³¹ See David M. Messick & Keith P. Sentis, Fairness and Preference, 15 J. EXPERIMENTAL Soc. PSYCHOL. 418, 422–34 (1979).

¹³² See generally Thompson & Loewenstein, supra note 130.

¹³³ Id.

¹³⁴ THOMPSON, supra note 1, at 55-56.

who wish to live according to principles of generosity and fairness must struggle with their inherent tendency to assess these principles in ways that favor their own interests. As Professor Max Bazerman observes, "The problem lies not in our desire to be unfair but in our inability to interpret information in an unbiased manner." Stepping outside of our narrow perspective requires imagination and empathy, 136 instincts that are likely less strong than our tendencies to think and feel egocentrically. 137

1. Imputations of Evil

Egocentric concerns lead us not only to think selfishly, but also to attribute ulterior and sometimes evil motives to those who disagree with us. If we have analyzed a situation and have concluded that equity demands a resolution of an issue or dispute in our favor, we too often conclude that those who do not see the matter as we do can only think as they do for bad reasons. Although we can sometimes see different perspectives and say, "reasonable minds can disagree," we all too often see malice or raw self-interest as our opponents' motivator. After all, if we believe that "fairness" dictates a particular outcome, then one who argues for a different approach must be advocating an unfair result. When these feelings emerge, negotiated settlements of disputes rapidly become difficult because the atmosphere

¹³⁵ See BAZERMAN, supra note 16, at 100.

¹³⁶ Empathy seems to be a critical component of ethical thought and fair behavior. See, e.g., C. Daniel Batson, Empathy, Altruism, and Justice: Another Perspective on Partiality, in Current Societal Concerns About Justice 49, 49–66 (Leo Montada & Melvin J. Lerner eds., 1996); see also Sidney Callahan, The Role of Emotion in Ethical Decisionmaking, Hastings Center Rep., June-July 1988, at 9, 12 (arguing that emotions, particularly empathy, are critically "important in moral and ethical functioning," and that "[m]any moral revolutions have been initiated by empathy felt for previously excluded groups: slaves, women, workers, children, the handicapped, experimental subjects, patients in institutions...").

¹³⁷ Anyone who has watched a sports event with a friend who roots for the opposing team should recall how often he or she disagrees with the friend about the fairness of the referees' calls. Events like this vividly illustrate how powerful the egocentric impulse is. See, e.g., Albert H. Hastorf & Hadley Cantril, They Saw a Game: A Case Study, 49 J. ABNORMAL AND SOC. PSYCHOL. 129, 129–34 (1954) (citing a study in which football fans from Princeton and Dartmouth viewed a film of a football game with each set of fans asserting that the opposing football team played more unfairly and aggressively than their favorite team).

becomes charged with "score-settling" or "evil-eradicating," and not with reaching a reasonable accommodation or splitting the difference. 139

2. Reactive Devaluation

Yet another concern stemming from egocentric biases is what social psychologists refer to as "reactive devaluation." Reactive devaluation arises from the tendency that negotiators have to see less value in concessions made by opponents than those arising from more neutral parties. In one revealing study, researchers asked subjects about whether an arms control proposal favored the United States or the Soviet Union. In the group that was told that Soviet leader Mikhail Gorbachev had developed the proposal, 56% felt that it favored the Russians, 16% thought it favored the U.S., and 16% concluded that it favored neither side. In contrast, when a second group was told that President Ronald Reagan had crafted the proposal, 45% felt that it favored both sides equally, 27% thought that the

¹³⁸ This can provide the justification for aggressive behavior that one would otherwise not pursue. See Gerald B. Wetlaufer, The Ethics of Lying in Negotiations, 75 IOWA L. REV. 1219, 1232, n.40 (1990) ("By concluding that our adversaries are unworthy, we render defensible, even virtuous, the most viciously self-interested conduct in which we might want to engage . . . [and] we grant ourselves permission to do those things that we may have wanted to do all along and for which we otherwise lacked permission.").

¹³⁹ See CRAVER, supra note 105, at 91 (warning that negotiators should "consider the possibility that they are attributing unfounded meaning to what is actually being conveyed. They may simply be reading more into their opponent's representations than is warranted—or intended—and this phenomenon may the basis for their resulting confusion."); FISHER & URY, supra note 1, at 25 ("It is all too easy to fall into the habit of putting the worst interpretation on what the other side says or does. A suspicious interpretation often follows naturally from one's existing perceptions. Moreover, it seems the 'safe' thing to do, and it shows spectators how bad the other side really is."); Kenneth W. Thomas, Conflict and Negotiation Processes in Organizations, in 3 HANDBOOK OF INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY 651, 681 (Marvin D. Dunnette & Leaetta M. Hough eds., 1992) (citing various studies demonstrating that there "appears to be a strong tendency for a party to see the other as relatively competitive, while seeing oneself as relatively uncompetitive and cooperative").

¹⁴⁰ Classification becomes an issue in discussing this issue. I place it in the context of egocentric bias, while Bazerman identifies it as an example of "fixed-pie" bias. See BAZERMAN, supra note 16, at 129 ("The mythical fixed pie also leads us to 'reactively devalue' any concession made simply because it is offered by an adversary."). Professors Russell Korobkin and Chris Guthrie suggest that it might be "a version of spiteful behavior, rather than a separate phenomenon." See Korobkin & Guthrie, supra note 4, at 80, n.17.

proposal benefited the Soviet Union, and 27% thought the proposal favored the United States.¹⁴¹

Egocentric bias helps explain reactive devaluation. If, as a result of imputing ulterior or evil motives, one perceives his or her opponent to be adopting unfair and unreasonable positions, then one is likely to view with great suspicion any concessions or alternatives that one's opponent puts forward. One will conclude either that the opponent has made no real concession or that the opponent has ulterior, ignoble motives in making the offer. Needless to say, reactive devaluation can make almost any negotiated settlement difficult to achieve.¹⁴² Reactive devaluation also leads to perceptions that concessions that are actually offered are rated lower than concessions that have been withheld, and that a compromise is rated less highly after it has been put on the table by the other side than it was before the other side offered it.¹⁴³

C. Fundamental Attribution Error as an Egocentric Bias

Fundamental attribution error, "the tendency to jump the inferential gun and to draw conclusions about the characters of others even when there are plausible alternative explanations for their conduct," 144 encompasses matters that go beyond egocentric concerns. For example, despite the often limited control the president has over the nation's economy, he typically gets praise

¹⁴¹ See Constance A. Stillinger et al., The Reactive Devaluation Barrier to Conflict Resolution, (unpublished manuscript, Stanford University), in BAZERMAN, supra note 16, at 129; see also Bazerman et al., supra note 7, at 1284 (discussing the same study).

¹⁴² See Robert H. Mnookin, Why Negotiations Fail: An Exploration of Barriers to the Resolution of Conflict, 8 Ohio State J. on Disp. Resol. 235, 247 (1993). Mnookin notes that,

[[]w]hen one side unilaterally offers a concession that it believes the other side should value and the other side reacts by devaluing the offer, this can obviously make resolution difficult. The recipient of a unilateral concession is apt to believe that her adversary has given up nothing of real value and may therefore resist any notion that she should offer something of real value in exchange.

Id.

¹⁴³ See Lee Ross & Constance Stillinger, Barriers to Conflict Resolution, 7 NEGOT. J. 389, 394–95 (1991).

¹⁴⁴ See ZIVA KUNDA, SOCIAL COGNITION: MAKING SENSE OF PEOPLE 429 (1999) (The fundamental attribution error arises when people "underestimate the extent to which behavior is shaped by the constraints of the situation and overestimate the extent to which it is shaped by people's underlying dispositions."). One of the ways that I counsel my students to avoid this error is by insisting that they never attribute to malice that which can be explained by incompetence.

when it is good and condemnation when it is bad.¹⁴⁵ Similarly, we commit this error when we assign blame or praise to individuals when factors beyond their control play an enormous part in their work product.¹⁴⁶

These examples, while illustrating attribution errors, do not involve egocentric bias because those making the (mis)judgments typically have no significant personal involvement in the situation described. Egocentric bias, however, is often implicated in the fundamental attribution error. This occurs when one attributes one's success to one's positive personal traits while simultaneously pointing to external forces beyond his or her control to explain failures. Accepting blame without attributing failure or fault to others (or to external forces) surely must rank as one of mankind's least enjoyable tasks—which means that we do not easily do it. Former President Richard Nixon, by most accounts, seemed incapable of acknowledging that his actions in the Watergate scandal warranted impeachment or his forced resignation.¹⁴⁷ To the contrary, his explanation for the scandal pointed to others for whom he had to assume responsibility (but apparently not the blame).¹⁴⁸

Fundamental attribution errors can easily undermine negotiations. Consider, for example, a dispute between a developer and an environmental group. Environmental disputes, involving, as they often do, an array of grievances touching extremely strong feelings on both sides and characterized by technical complexities, legal posturing, and a general lack of trust, can appear intractable. Available research indicates that a variety of cognitive biases ranging from "fixed-pie" assumptions 149 to "endowment"

¹⁴⁵ See, e.g., Bernard Roshco, *Investor Illiteracy*, 10 AM. PROSPECT, Mar.-Apr. 1999, at 69, 72 (stating that "[m]istaken attributions of responsibility determine elections; the president gets undeserved credit—and blame—for the performance of the national economy").

¹⁴⁶ See, e.g., ROBBINS, supra note 16, at 126 (noting that the fundamental attribution error "can explain why a sales manager is prone to attribute the poor performance of her sales agents to laziness rather than to the innovative product line introduced by a competitor").

¹⁴⁷ See, e.g., BOB WOODWARD & CARL BERNSTEIN, THE FINAL DAYS 428 (1976) (noting that, as late as Tuesday, August 6, 1974, two days before submitting his resignation, Nixon insisted to his staff that "I've analyzed the best I can, the best memory I can, buttressed by miles and miles of tape, and I have not found an impeachable offense, and therefore, resignation is not an acceptable course.").

¹⁴⁸ Id. at 77 ("Blaming Watergate and other campaign abuses on 'overzealous' associates, Nixon said they had made 'mistakes' that I never approved of, mistakes that I would never have tolerated, but mistakes for which I will have to take the responsibility.").

¹⁴⁹ See infra notes 227-33 and accompanying text for a discussion of this bias.

effects¹⁵⁰ will plague any negotiations between the parties.¹⁵¹ As Professor Thompson notes, fundamental attribution errors invariably play a major confounding role because each side, when asked to name the cause of the dispute, will attribute the negative aspects of the conflict to the dispositions and evil motives of the other party.¹⁵²

D. Illusion of Control

Closely related to the fundamental attribution error is what has been described as the "illusion of control" bias, which arises when one overestimates his or her ability to affect outcomes that are really determined by factors outside of one's control. Although the precise psychological dynamic that causes this bias remains open to debate, there is little doubt that people have a strong tendency to fall into this perception trap. In fact, so

¹⁵⁰ See infra notes 192-200 and accompanying text for a discussion of this bias.

¹⁵¹ See generally Bazerman et al., supra note 7 (discussing how at least six systematic biases are particularly endemic to environmental disputes, including fixed-pie bias, pseudo-sacredness, egocentrism, overconfidence, unrealistic optimism, and endowment effects).

¹⁵² THOMPSON, *supra* note 1, at 240 (describing the negative attributions that each will assign: "[D]evelopers regard environmentalists to be fanatic lunatics; environmentalists regard developers to be sinister and greedy.").

¹⁵³ See, e.g., KUNDA, supra note 144, at 65 (noting that "[o]ne of the central lessons of social psychological research is that we tend to underestimate the power of situations to influence behavior. We do not realize that seemingly subtle situational differences can have dramatic impact on behavior and we tend to assume that behaviors are driven predominantly by underlying personality dispositions.") (citations omitted); Birke & Fox, supra note 7, at 16-17 (citing studies that demonstrate that people have a "tendency to overestimate their ability to control outcomes that are determined by factors outside of their control"); Susan M. Houghton et al., No Safety in Numbers: Persistence of Biases and Their Effects on Team Risk Perception and Team Decision Making, 25 GROUP & ORG. MGMT. 325 (2000) (noting that cognitive biases, such as the illusion of control, affect team decisionmaking by lowering their perception of the risks associated with decisions); Surinder S. Kahai et al., Active Involvement, Familiarity, Framing, and the Illusion of Control During Decision Support System Use, 23 DECISION SUPPORT SYS. 133, 134 (1998) (defining illusion of control as an "unwarranted inflation of expectations of success" and noting that this bias led to greater user satisfaction, better mood, and lower preference for thinking more before making final decisions); Ellen J. Langer, The Illusion of Control, 32 J. PERSONALITY & SOC. PSYCHOL. 311 (1975) (seminal study identifying the illusion of control bias).

¹⁵⁴ See Langer, supra note 153, at 323 ("Whether it is seen as a need for competence, an instinct to master, a striving for superiority, or a striving for personal causation, most social scientists agree that there is a motivation to master one's

strong is this drive that even factors as small as *touching* a physical object can give people a sense that they control events when they do not. For example, in a study of securities analysts, individuals were divided into two groups. Each was asked to pay \$1 to participate in a game where, if they picked the correct card out of a pack of 52 cards, they would win \$100. The first group was shown the card while the second group was allowed to see it and touch it. Analysts who had only been shown the card asked for an average of \$1.89 in return for relinquishing their opportunity to win the \$100, but those who had *touched* the card demanded an average of \$8.96 before they would give up their opportunity to win the prize. Is Interestingly, those analysts with MBA degrees who had touched the card, despite their higher education, demanded even more—an average of \$11.19—for surrendering their chance to win the \$100.156 Similar studies illustrate the same dynamic: participants in a lottery who choose their own tickets demand a substantially higher price to relinquish them than those who have been assigned tickets. 157

Negotiators must obviously confront illusion of control issues every time they bargain. They should be particularly aware of this tendency when confronting matters that involve future events or that present high degrees of risk. The inability to make precise determinations obviously presents a major source of anxiety and concern. Rather than inflating one's predictive powers, however, one would be far better off seeking ways to protect one's interests against unforeseen contingencies, say, by incorporating provisions that explicitly condition the terms of the deal according to future outcomes.¹⁵⁸ That is, rather than falling prey to an illusion of control, negotiators would improve bargaining outcomes by actually taking steps to improve their control of the situation.¹⁵⁹

environment, and a complete mastery would include the ability to 'beat the odds,' that is, to control chance events.") (citations omitted).

¹⁵⁵ See Handshake Creates Illusion of Control in Analysts, INVESTOR RELATIONS BUS., July 24, 2000, at 14, 14, available at LEXIS, News Library, Invrel File.

¹⁵⁶ Id. According to one observer, "[a]nalysts think they're much smarter than they are." Id.

¹⁵⁷ See Birke & Fox, supra note 7, at 17 (citing research by Professor Langer).

¹⁵⁸ Bazerman & Gillespie argue that one of the best ways of dealing with future uncertainty and high risk is to rely on "contingent" contracts, which provide different terms according to future events. For example, parties to a movie contract could tie an actor's pay to how well a film does at the box office. See Max H. Bazerman & James J. Gillespie, Betting on the Future: The Virtues of Contingent Contracts, 77 HARV. BUS. REV., Sept.—Oct., 1999, at 155, 156.

¹⁵⁹ Responding to several studies suggesting that positive feelings associated with illusions, such as a false sense of control, promote confidence and achievement, Professor

E. Overconfidence

Radio listeners invariably chuckle when they hear Garrison Keiller's monologue on the show, *Prairie Home Companion*, in which he reports on the fictional city of Lake Woebegone, "where . . . all the children are above average." In the same vein, most people, when asked how they will do in an upcoming negotiation, strongly predict that they will do better than average, notwithstanding the mathematical impossibilities of beating the average. Perhaps the clearest example of this is a study by Professors Max Bazerman and Margaret Neale, in which they asked negotiators in a "final-offer" arbitration exercise (i.e., in which an arbitrator, without the authority to "split the difference," must select one side's final offer depending on which the arbitrator feels is fairer) to estimate their likelihood of prevailing. Invariably, the negotiators estimated a greater than 50% chance of having their offer chosen, a clear mathematical impossibility. 161

Bazerman acknowledges that they may occasionally prove beneficial (e.g., with health issues where positive feelings may actually support the healing process), but strongly cautions against placing too much emphasis on their positive aspects:

I... believe that the story told by this literature is very incomplete and dangerous in most decision-making environments. People lose their money investing their life savings in new businesses with little chance of success. People lose their jobs when they falsely conclude that they are irreplaceable and make ultimatums to their employers. I believe that it is not sustainable to continually fool yourself, or to fool other people and maintain the belief that you are helping them. I believe that you cannot continue these illusions without reducing the quality of decisions that you make. In most cases, positive illusions provide a short-term benefit with larger long-term costs. I see them as a form of emotional procrastination.

BAZERMAN, supra note 16, at 98.

¹⁶⁰ See Bazerman et al., supra note 7, at 1289–90 (citing a study in which "68% of the MBA students in a negotiation class predicted that their bargaining outcomes would fall in the upper 25% of the class").

¹⁶¹ See Max H. Bazerman & Margaret A. Neale, Improving Negotiation Effectiveness Under Final Offer Arbitration: The Role of Selection and Training, 67 J. APPLIED PSYCHOL. 543, 544 (1982).

Whereas only 50% of all final offers can be accepted, the average subject estimated a much higher probability that his or her final offer would be accepted. Assuming that the final offer represents a judgment about the amount of concession necessary to win the arbitration, this finding is consistent with evidence that people tend to be overconfident in their fallible judgments.

Id. (citations omitted); see also Birke & Fox, supra note 7, at 15 ("Egocentric biases are reinforced by so-called 'positive illusions,' which include unrealistic optimism..."); Jolls et al., supra note 7, at 1524 ("A common feature of human behavior is overoptimism: People tend to think that bad events are far less likely to happen to them

Similarly, despite extensive research demonstrating that most new businesses fail within a few years, ¹⁶² generation after generation of entrepreneurs has ignored this grim statistic and plunged into the market. ¹⁶³ Research strongly suggests that these budding business people do so buoyed by excessive optimism. ¹⁶⁴ The same phenomenon undoubtedly fueled the run-up of stock market prices in the 1990s. ¹⁶⁵ Despite the benefit to society from having so many eager entrepreneurs and investors willing to risk their time and money, ¹⁶⁶ one can see that many of these financial players have little, if any, realistic chance of success, and that the emotional and financial costs of overoptimistic judgments remain high.

What heightens some researchers' concerns about overconfidence is that people tend to be most optimistic in circumstances in which they have the least amount of information. For example, when test subjects are given quizzes and asked to estimate the chances that they have answered the questions correctly, they are more likely to estimate that they have done well when they are questioned in areas with which they have no familiarity than when given questions where they have significant knowledge. ¹⁶⁷ In the latter

than to others. Thus, most people think that their probability of a bad outcome is far less than others' probability, although of course this cannot be true for more than half the population."); Kramer et al., *supra* note 7, at 111 (noting the existence of overconfidence bias).

- 162 See Frequently Asked Questions, Office of Advocacy, Small Business Administration, at http://app1.sba.gov/faqs/faqindex.cfm?areaID=24 (last visited Nov. 11, 2004) (study by SBA Office of Advocacy indicating that between 1989 and 1992, only 39.5% of new business starts remained open after six years).
 - ¹⁶³ Id. (noting that roughly 600,000 new businesses started in 2000).
- 164 See, e.g., Colin Camerer & Dan Lovallo, Overconfidence and Excess Entry: An Experimental Approach, 89 Am. ECON. REV. 306 (1999) (citing psychology studies indicating that overconfidence among entrepreneurs leads to excessive business entry into the market).
- 165 See Paul Krugman, Delusions of Prosperity, N.Y. TIMES, Aug. 14, 2001, at 17 (noting that the economic downturn beginning in the year 2001 did not require a restoration of business confidence because "excessive confidence may be part of the problem. Instead of being the victims of self-fulfilling pessimism, we may be suffering from self-defeating optimism.").
- 166 See Rachlinski, supra note 20, at 1211 (noting that, "[i]f every potential restaurateur carefully weighed the well-known statistic that three out of every four new restaurants fail, then it is hard to see where new restaurants would come from").
- 167 See BAZERMAN, supra note 16, at 33 (noting that "[t]he most well-established finding in the overconfidence literature is the tendency of people to be most overconfident of the correctness of their answers when asked to respond to questions of moderate to extreme difficulty"); see also Philip G. Peters, Jr., Hindsight Bias and Tort Liability: Avoiding Premature Conclusions, 31 ARIZ. St. L.J. 1277, 1288 n.78 (1999)

case, people typically demonstrate no overconfidence, and often some underconfidence. ¹⁶⁸

Several studies suggest that, to the extent that an overconfidence bias exists, it can be minimized. Subjects who are forced to state reasons why their answers might be correct before stating the degree of confidence they had in their answers dramatically reduced the degree of overconfidence they had in estimating the accuracy of their answers. Similarly, subjects who are asked to state the weaknesses in their views or who include a "devil's advocate" in their deliberations tend to reduce the degree of bias in their deliberations.

Other researchers, however, are less convinced that over-optimism exists to a degree that merits particular concern.¹⁷¹ They question whether

(citing a similar study to the effect that "[t]he overconfidence bias causes people to place more confidence in their answers than they should").

¹⁶⁸ See Peters, supra note 167, at 1288; see also Cass R. Sunstein, Hazardous Heuristics, 70 U. CHI. L. REV. 751, 773–74 (2003) (citing a number of studies showing that people are quite realistic in estimating risk and, in some cases, overly pessimistic about estimating risk).

¹⁶⁹ See Asher Koriat et al., Reasons for Confidence, 6 J. EXPERIMENTAL PSYCHOL.: Hum. Learning & Memory 107, 113 (1980).

 170 See Birke & Fox, supra note 7, at 19; see also infra notes 314–18 and accompanying text.

171 See Sunstein, supra note 168, at 775–76. Citing recent data challenging the existence of a serious problem of over-optimism, Sunstein argues that, "[i]f optimism were widespread, we should probably see far more recklessness and failure than we generally observe." Id. at 775. Accordingly, he concludes:

[Claims that people are generally realistic about estimating risks] raise real doubts about the view that optimistic bias provides a good reason for paternalistic interventions. To be sure, we know enough about optimistic bias to give serious consideration to informational campaigns to ensure that people will not have an inflated belief in their own immunity. In the context of smoking, statistical knowledge of risks might be inadequate if people believe themselves relatively immune. But in view of [recent studies showing the opposite], the idea of paternalism is generally justified by optimistic bias must be regarded as an unproven speculation. If people are not excessively optimistic when the consequences of error are severe, if the bias is small or nonexistent when decisions are actually being made, and if people overstate low-probability risks, there is no problem for the law to correct.

Id. at 775-76; see also Rachlinski, supra note 20, at 1211 (noting that, because of the conflicting evidence about the existence or potency of an optimism bias, scholars have come to "no resolution" about it).

Along the same line, the author has noted more lack of confidence than overoptimism among his MBA negotiation students. When asked to fill out a self-assessment of their negotiation strengths and weaknesses that includes the question, "Do you "debiasing" techniques work effectively to address over-optimism¹⁷² or that, if effective, are terribly practical.¹⁷³

F. Self-Enhancement Bias

Given that people tend to be overconfident, it should come as no surprise that they also think of themselves in a particularly positive light compared to how they think of others. As Professors Richard Birke and Craig Fox put it:

[M]ost people think that they are more intelligent and fair minded than average. Ninety-four percent of university professors believe that they do a better job than their colleagues. More to the point, most negotiators believe themselves to be more flexible, more purposeful, more fair, more competent, more honest and more cooperative than their counterparts. 174

This tendency to think well of oneself has been described as a "self-enhancement" bias.¹⁷⁵ Passing moral judgment on this tendency misses the point. Self-enhancement bias is something hard-wired within all of us; it is not necessarily a moral failure of vain individuals—although it can be when carried to extremes. While it may have survival value in terms of evolution,¹⁷⁶ it also carries the potential to lead us astray in our decisionmaking generally and in negotiation settings specifically.¹⁷⁷ For

consider yourself a good negotiator?" a consistent majority responds, "No." The best explanation that one can muster to explain this is that students enter negotiations fully aware of the weaknesses in their positions, but ignorant of those in their opponents. Because they do not know the other side's shortcomings, they assume that the other side must be stronger.

¹⁷² See Sunstein, supra note 168, at 774 (citing a study that explored "a variety of apparently promising strategies to reduce optimism bias with respect to relative risk. The punchline? None of these strategies worked.") (citation omitted).

¹⁷³ Id. at 774 (citing a study that reduced excess optimism regarding health risks through an approach in which people were given specific information about their own standing on risk factors or about their peers' standing on risk factors, but noting that "it is not easy to adapt this information to media campaigns designed to improve human health").

¹⁷⁴ Birke & Fox, supra note 7, at 17-18, and citations therein.

¹⁷⁵ See, e.g., Kramer et al., supra note 7, at 112 (noting the "pervasive tendency for individuals' judgments to be self-enhancing across a wide variety of social contexts").

¹⁷⁶ Id. at 114 (citing studies showing that "[p]ositive mood has been found to increase individuals' optimism and confidence about future outcomes").

¹⁷⁷ Id. at 125 (noting that, while a positive "mood may improve actual performance, it also fosters significant distortions of performance").

example, one who believes himself or herself to be doing well in a negotiation may actually be performing in a sub-optimal way because of flawed thinking attributable to this bias. An automobile salesperson may well exploit this bias by offering fulsome praise to an eager, naïve purchaser about how well the buyer negotiated an agreement when, in fact, the salesperson has just taken extreme advantage of the customer.

G. Transparency Bias/"Curse of Knowledge"

One of the most insidious egocentric biases is also one of the most subtle. When one is involved in a personal relationship, a romance, or a negotiation, nothing undermines good feelings and the flow of communication more than having one's "pure" motives questioned or challenged. In fact, the more sincere one feels, the more selfless one believes one's proposals to be, and the more sacrificing one's actions, the more painful and infuriating it is to have the other person act dismissively towards one's ideas. At such times, of course, one's immediate response is to assume the very worst about one's counterpart. This may lead to anger, estrangement, and hostile actions. 178

The problem in many of these difficult situations is that, despite one's sincerity and selfless approach, the other side simply cannot read one's mind or motives. Because no one can truly read minds, the possibilities for misunderstanding and conflict remain ever present. Unfortunately, our egocentric perspective blinds us to the possibility that others simply cannot measure or judge our actions except by the overt signals that we send, which may not be as clear to others as they are to us.¹⁷⁹ This inability to read each other's minds and to assess each other's motives is what can be called a

¹⁷⁸ I see this constantly when reviewing student journals in my negotiation course. Time and time again, students who have just completed a negotiation question the sincerity and honesty of one another, insisting that they themselves had acted honorably. Their opponents invariably see the negotiation in the exact opposite light.

¹⁷⁹ Recognizing the distinction between one's overt signals and one's inner thoughts is absolutely critical to the law. The law of contracts recognizes only those terms of an agreement that are objectively manifested. Inner messages or internal meanings, however strong, do not govern contracts. See RICHARD A. MANN & BARRY ROBERTS, BUSINESS LAW AND THE REGULATION OF BUSINESS 185 (7th ed. 2002) ("To form a contract, the agreement must be objectively manifested. The important thing is what the parties indicate to one another by spoken or written words or by conduct. The law, therefore, applies an objective standard and is concerned only with the assent, agreement, or intention of a party as it reasonably appears from his words or actions.").

"transparency" bias, i.e., each side believes that his or her thoughts, motives, and feelings are transparent to the other side when that is not so.

Closely related to the transparency bias is what Professor Bazerman calls the "curse of knowledge." As he explains it, notwithstanding the economic models that suggest additional information is always valuable to real-life decisionmakers, studies demonstrate the contrary. For example, individuals who know the answer to a problem typically overestimate the percentage of their peers who can solve it. This becomes a serious problem when one sends an ambiguous message—which is clear to him or her—to another only to discover that the receiver of the message fails to understand it. People often become perplexed when the ambiguous message is not "magically understood by the other party." 182

Negotiators can easily fall prey to the transparency bias, with the results being, at a minimum, perplexing and sometimes disastrous. Some observers, for example, believe the Japanese attack on Pearl Harbor that triggered America's entry into World War II stemmed, in part, from a fundamental misunderstanding between the two countries about each other's intentions and motives. From hindsight, it is clear that each mistakenly thought its position was clear to the other. Unfortunately, when one falls prey to this bias, it is exceedingly difficult to undo.

V. "MIXED" AND MISCELLANEOUS BIASES

In addition to the heuristics and biases already discussed, there lies a set of biases that seem less easily classified either as cognitive or egocentric. In some cases, they seem to fit within both categories; in others, they seem to fit within neither.

¹⁸⁰ See BAZERMAN, supra note 16, at 38.

¹⁸¹ Id. (citing a study by R.S. Nickerson).

¹⁸² Id. (citing a working paper by B. Keysar, The Illusory Transparency of Intention: Linguistic Perspective Taking in Text (1992).)

¹⁸³ See JOHN TOLAND, THE RISING SUN 166-70 (1971) (describing how Japan's skepticism about U.S. sincerity misunderstood a message from the U.S. demanding that Japan withdraw from China as a condition to restoring good relations between the two countries). In fact, the U.S. never insisted that Japan withdraw from Manchuria, the territory that Japan felt was crucial to its interests and needs. As Toland wrote: "A war that need not have been fought was about to be fought because of mutual misunderstanding, language difficulties, and mistranslations as well as Japanese opportunism, . . . irrationality, honor, pride, and fear—and American racial prejudice, distrust, ignorance of the Orient, rigidity, self-righteousness, honor, national pride and fear." *Id.*

A. Avoidance of Loss/Risk Aversion

Classic economics holds that people should treat equal risks equally, but they do not.¹⁸⁴ To the contrary, study after study confirms that humans react far more negatively to the risk of loss than to the potential for gain.¹⁸⁵ This is a well-known phenomenon called "risk aversion," i.e., the notion that "most people will take a sure thing over a gamble, even where the gamble may have a somewhat higher 'expected' payoff." ¹⁸⁶

There seems to be a feeling of humiliation associated with losses that makes them so unacceptable. This explains why gamblers, when losing money, will often take enormous risks to break even rather than leave the table with a loss¹⁸⁷—thus the popularity of long shots on the last race of the day.¹⁸⁸ Similarly, loss aversion explains why investors are two-and-a-half times more likely to sell stocks that have increased in value than those with price declines.¹⁸⁹

The aversion to loss carries special importance in negotiations because bargaining almost always involves trading gains and losses—opening up

¹⁸⁴ See Sunstein, supra note 7, at 1179 (noting that, "[c]ontrary to economic theory, people do not treat out-of-pocket costs and opportunity costs as if they were equivalent").

¹⁸⁵ See, e.g., id.; see also Mnookin, supra note 142, at 244–45; Margaret A. Neale et al., The Framing of Negotiations: Contextual Versus Task Frames, 39 ORG. BEHAV. AND HUM. DECISION PROCESSES 228, 229 (1987) (stating that "decision makers treat the prospect of gains much differently than the prospect of losses"); Rachlinski, supra note 32, at 759 (noting that "[p]eople worry more about the regret that they would feel from undertaking an affirmative act that they ultimately wish they had not undertaken than the regret that they would feel from the failure to take an affirmative act that they ultimately wish they had undertaken"); Sunstein, supra note 14, at 44 ("Kahneman and Tversky... show that people usually hate losses from their current situation—in fact, they dislike losses far more than they like equivalent gains.").

¹⁸⁶ Mnookin, supra note 142, at 244.

¹⁸⁷ Id. (noting that researchers have made a "remarkable discovery" about behavior under uncertainty—"in order to avoid what would otherwise be a sure loss, many people will gamble, even if the expected loss from the gamble is larger").

¹⁸⁸ See, e.g., Amos Tversky & Daniel Kahneman, The Framing of Decisions and the Psychology of Choice, 211 SCI. 453, 456 (1981) (noting how people, when faced with loss, may take risks that they would ordinarily find unacceptable). Tversky and Kahneman argue that this analysis is supported by the popularity of long shots on the last race of the day. Id.

¹⁸⁹ See Robert Barker, Why Not Lose Those Mutual Fund Losers?, BUS. WK., Oct. 23, 2000, at 170, 170 (noting that loss aversion "has been found repeatedly among people investing in stocks, options, futures, even in homes. It's a basic human bias, one [Mr. Spock from "Star Trek"] just wouldn't get.").

numerous pitfalls leading to thwarted deals.¹⁹⁰ Loss aversion strongly suggests that negotiators will be much less likely to strike deals that include unavoidable losses than to include the promise of extra gains. Professor Jeffrey Rachlinski notes, for example, that risk aversion can easily lead defendants to fight lawsuits that they would be better off settling.¹⁹¹ In addition, to avoid the losses, defendants often undertake long-shot strategies that have little chance of succeeding.

B. Endowment Effect and Status Quo Bias

Closely related to loss aversion is what social psychologists call the "endowment effect." That is, people demand more to give up an object than they would be willing to pay to acquire it. For example, undergraduate students in a law and economics course at Cornell University who received Cornell coffee mugs demanded more than twice as much to give up a mug as those who were given cash were willing to pay for them. Similarly, subjects in a series of studies insisted on receiving a higher wage for doing household and academic chores than the wage that they considered fair to pay others for doing the same work. Studies such as these challenge

¹⁹⁰ See Mnookin, supra note 142, at 244. Mnookin points out:

Loss aversion can act as a cognitive barrier to the negotiated resolution of conflict for a variety of reasons. For example, both sides may fight on in a dispute in the hope that they may avoid any losses, even though the continuation of the dispute involves a gamble in which the loss may end up being far greater. Loss aversion may explain Lyndon Johnson's decision, in 1965, to commit additional troops to Vietnam as an attempt to avoid the sure loss attendant to withdrawal, and as a gamble that there might be some way in the future to avoid any loss at all.

Id. at 244-45.

¹⁹¹ Rachlinski, *supra* note 32, at 759 n.95.

¹⁹² See, e.g., Jolls et al., supra note 7, at 1484 (noting that the endowment effect is "a manifestation of the broader phenomenon of 'loss aversion'—the idea that losses are weighted more heavily than gains"); Rachlinski, supra note 32, at 758–59 (noting that the endowment effect leads people to "get attached to the status quo and value things that they own more than things they do not").

¹⁹³ Daniel Kahneman et al., Experimental Tests of the Endowment Effect and the Coase Theorem, 98 J. Pol. Econ. 1325 (1990) [hereinafter Kahneman, Experimental]; see also Daniel Kahneman et al., Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias, J. Econ. Persp. 193, 195-97 (1991) [hereinafter Kahneman, Anomalies].

¹⁹⁴ See generally Vera Hoorens et al., Time Is an Amazingly Variable Amount of Money: Endowment and Ownership Effects in the Subjective Value of Working Time, 20 J. ECON. PSYCHOL. 383, 383 (1999).

fundamental economics assumptions that people value things according to some "intrinsic" value that they carry and raise challenges to negotiators who seek to approach transactions from a rational perspective. ¹⁹⁵ Of course, what seems irrational today may be quite rational from an evolutionary perspective. ¹⁹⁶

The endowment effect reflects a preference for the status quo, a well-known human trait that most people exhibit for, other things being equal, leaving things as they are. 197 This reflects the common observation that people would prefer to make sins of omission rather than commission. 198 For example, our legal system operates on the assumption that it is better that nine guilty men should go free rather than one innocent person should be wrongfully convicted. 199 The dread that most people carry for undertaking an action that proves wrong far outweighs their concern for wrongfully failing to act. In the abstract, worrying about false positives more than false negatives is no worse than the reverse. In real-life, however, there is no guarantee that such attitudes produce favorable outcomes. It will always depend on the situation. For example, parents who refuse to vaccinate their

¹⁹⁵ See Jennifer Arlen, Comment, The Future of Behavioral Economic Analysis of Law, 51 VAND. L. REV. 1765, 1771 (1998) (noting that the "endowment effect challenges the fundamental assumption of economics that, absent wealth effects, an individual's maximum willingness to pay for a good should equal his minimum sale price").

¹⁹⁶ Professor Jones suggests that behavioral biology may well explain our preference for holding on to what we have:

There is much written in behavioral biology documenting the widespread phenomenon in territorial systems that residents of a territory almost invariably defeat challengers. Although the literature does not refer to it in terms of "endowment effects," observational and experimental evidence suggests that defenders of territory routinely ascribe a higher value to what they have than they ascribe to the same territory if they have to procure it from another. That is, they fight harder to defend a territory than they do to reacquire it, once it has been transferred to another. The adaptive value of a predisposition to hang on to what you have, once you have managed to get it, may provide both an empirical and a theoretical foundation for understanding and predicting the endowment effect in humans.

Jones, supra note 10, at 1184-85.

¹⁹⁷ See Arlen, supra note 195, at 1772 (noting "that people value the status quo for its own sake implies that people's choices often are 'path dependent,' with the preferred outcome depending on the initial choice").

¹⁹⁸ See Blu Putnam, Sins of Omission and Commission, GLOBAL INVESTOR, Apr. 1, 2000, at 39, 39 (noting that risk managers and corporate planners "avoid sins of commission at all costs, consequently they are constantly committing sins of omission").

¹⁹⁹ One might argue that the medical profession shares a similar preference towards inaction in the admonition of the Hippocratic Oath: "First, do no harm."

children out of a fear of the vaccine's side effects demonstrably place their children at greater risk than they do by vaccinating them.²⁰⁰ One can easily see how this bias can produce unnecessary stubbornness and rigid thinking in negotiators.

C. Cultural Biases

Researchers have long recognized that culture affects one's values and beliefs. Americans, for example, tend to value freedom of religion and speech, while other cultures recoil from the notion that people should be free to say what they want or to follow any religious system that appeals to them.

Recent research suggests that culture's influence extends beyond these patterns—evidently culture affects both whether²⁰¹ and how²⁰² people reason. According to this research, Americans favor logical approaches that reject contradictions while Chinese prefer dialectical approaches that accept contradictions.²⁰³ For example, proverbs that embrace inconsistencies such as "Too modest is half boastful" charm Chinese test subjects, while they tend to irritate American participants.²⁰⁴ Similarly, research suggests that Americans will follow arguments to their logical conclusion irrespective of the underlying reality, while Asian subjects will reject logic whenever it contradicts their real-life experiences.²⁰⁵

²⁰⁰ See Ilana Ritov & Jonathan Baron, Reluctance to Vaccinate: Omission Bias and Ambiguity, 3 J. BEHAV. DECISION MAKING 263, 263 (1990).

²⁰¹ Professor Robbins observes:

Cultures . . . differ in terms of time orientation, the importance of rationality, their belief in the ability of people to solve problems, and preference for collective decision making. While rationality is valued in North America, that's not true everywhere in the world. A North American manager might make an important decision intuitively, but he or she knows that it's important to appear to proceed in a rational fashion. This is because rationality is highly valued in the West. In countries such as Iran, where rationality is not deified, efforts to appear rational are not necessary.

ROBBINS, supra note 16, at 143.

²⁰² See, e.g., Erica Goode, How Culture Molds Habits of Thought, N.Y. TIMES, Aug. 8, 2000, at F1 (citing research suggesting that "people who grow up in different cultures do not just think about different things: they think differently").

²⁰³ Id.

²⁰⁴ Id.

²⁰⁵ Id. For example, presented with the syllogism, "All animals with fur hibernate. Rabbits have fur. Therefore, rabbits hibernate," Americans, according to researchers, were more likely to accept the validity of the argument, separating its formal structure...

Based on this research, one should not be surprised that culture affects cognitive processes in negotiation settings. A recent study by Professors Michele Gelfand and Sophia Christakopoulou seems to confirm this with respect to fixed-pie biases²⁰⁶ in bargaining situations.²⁰⁷ In this study, American students negotiated with Greek students over workplace issues such as work schedules, layoff procedures, and vacation time. According to the authors, Americans approach such issues with a more individualistic approach than their Greek counterparts, leading the Americans to claim more value for themselves and to learn less about the priorities of their opponents.²⁰⁸ In contrast, the Greek students attended more to the needs of their American counterparts, as evidenced in their greater judgment accuracy of the Americans' interests, offers, and behaviors during the negotiation.²⁰⁹ Thus, the Americans exhibited substantially more fixed-pie bias than the Greeks. One of the results: The Greek students felt less satisfied with the outcome of the negotiations.²¹⁰ Given this, one could see the likelihood of possible negative feelings in future negotiations if this had been a real-life setting.

The broad lesson to be learned from this and similar studies according to the authors is the need for greater awareness of cultural differences:

The more general implication of this research is that the assumptions underlying the dominant paradigm in negotiation need to be explicated and examined for universality. In our view, it is likely that there are both universal and culture-specific aspects of negotiation processes. In other words, our analysis suggests that the larger cultural context in which negotiators are embedded plays an important role in directing negotiators' cognitions, restricting attention to particular aspects of the self and the environment, and rendering certain judgments more susceptible to error.²¹¹

from its content." Asians, on the other hand, often rejected these arguments based on their knowledge that rabbits do not, in fact, hibernate. *Id.*

²⁰⁶ A fixed-pie bias occurs when negotiators fail to accurately understand their counterparts' interests. That is, negotiators approach bargaining situations with the assumption that both sides value every aspect of the deal in precisely the same manner with the same priority for each issue. For a discussion of this bias, see *infra* notes 225–31 and accompanying text.

²⁰⁷ See Michele J. Gelfand & Sophia Christakopoulou, Culture and Negotiator Cognition: Judgment Accuracy and Negotiation Processes in Individualistic and Collectivistic Cultures, 79 ORG. BEHAV. & HUM. DECISION PROCESSES 248, 248 (1999).

²⁰⁸ Id. at 263.

²⁰⁹ Id.

²¹⁰ Id.

²¹¹ Id. at 263-64 (citation omitted).

D. Excessive Commitment to a Previous Course of Action/Escalation of Conflict

Most negotiators have had the experience of attaching greater and greater value to something the more they bargain over it, leading them to continue to pursue the object even to the point of making extreme offers—far removed from reality—for it. Professors Bazerman and Neale have dubbed this phenomenon the "nonrational escalation of commitment," which they describe as "the degree to which an individual escalates commitment to a previously selected course of action to a point beyond that which rational analysis would recommend." ²¹²

Professors who teach negotiation courses often turn to a classroom game to illustrate in a vivid manner how this human dynamic operates. The game, called the "Dollar Auction," requires participants to bid on a dollar in a straightforward manner, but with one twist: the winner gets the dollar, but the second-highest bidder must pay his or her losing bid to the professor/auctioneer. Almost without exception, after a flurry of offers approaching one dollar, two bidders will be left, each realizing that if he or she is outbid the winner will get the dollar and the loser will receive only the embarrassment of having to pay the auctioneer. At this point, emotions typically escalate—especially if there is a group of observers chuckling at the two players' predicament and egging them on—and the bidding for the dollar will reach three to five dollars or higher until at last one of the players, visibly agitated, gives up. The "winner," realizing that he or she has attained, at best, a pyrrhic victory, rarely looks much happier than the loser.

From a rational perspective, once it is clear that the bidders are merely increasing the loss they will incur and that neither will gain a financial advantage from further escalation, they should quit the contest. That, however, almost never happens. Anger and a reluctance to "lose face" overwhelm rational faculties during the auction, often to the extreme financial benefit of the auctioneer.²¹⁵

²¹² Max Bazerman & Margaret Neale, Nonrational Escalation of Commitment in Negotiation, 10 Eur. MGMT. J. 163, 164 (1992).

²¹³ The game was invented by Martin Shubik, a former game theorist at RAND. See Martin Shubik, The Dollar Auction Game: A Paradox in Noncooperative Behavior and Escalation, 15 J. CONFLICT RESOL. 109, 109 (1971).

²¹⁴ In some cases, the bidding has gotten out of hand. The author conducted one negotiation in which the winning bid was \$60 and two in which the high bid was \$40.

²¹⁵ Professor Bazerman reports that he auctions \$20 bills rather than \$1 bills, resulting in his earning over \$20,000 in a period of roughly nine years. In the spirit of

The business world provides ample confirmation of the tendency to escalate. Robert Campeau is considered by many as the best example of one whose ego-driven ambitions exceeded his reason. The Campeau Corporation completed a successful hostile takeover of Federated Department Stores in 1988 after engaging in a historic bidding war with Macy's. When the bidding ended, Campeau paid \$8.17 billion for the stock of a company with a preacquisition market value of \$2.93 billion. Campeau financed 97% of the purchase price with debt. Less than two years later, Federated filed for Chapter 11 bankruptcy and Campeau lost his job.²¹⁶

That successful businesspeople so easily succumb to the temptation to overbid, often jeopardizing millions of dollars, illustrates the strength of this particular dynamic. What makes this such an irresistible drive? Bazerman and Neale offer three critical causes for nonrational escalation. First, there is biased perception and judgment—once one has committed to a basic strategy, he or she is likely to look primarily for data that is consistent with the initial decision.²¹⁷ Second, impression management—most people worry about the impression they make on others. Those who switch from a course of action that they have undertaken often lose face²¹⁸ with and support from the public and their constituencies. Rather than lose face or be perceived as a

good will and charity, he either uses the money to provide food and beverage to the class or to support various charities. See BAZERMAN, supra note 16, at 71.

²¹⁶ For a description of the bidding war, see Bazerman & Neale, *supra* note 212, at 163-64. This is a classic example of the winner's curse. *See infra* notes 248-52 and accompanying text.

²¹⁷ Id. at 166 (strongly advising negotiators to seek disconfirming data and independent sources of information as ways of avoiding nonrational escalations).

²¹⁸ Face-loss presents a non-trivial challenge to any decisionmaker. Countries have gone to war and people have faced death rather than lose face. See, e.g., BERT R. BROWN, Face-Saving and Face Restoration in Negotiation, in NEGOTIATIONS: SOCIAL-PSYCHOLOGICAL PERSPECTIVES 275–99 (Daniel Druckman ed., 1977) (noting that, "[i]n some instances, protecting against loss of face becomes so central an issue that it 'swamps' the importance of the tangible issues at stake and generates intense conflicts that can impede progress toward agreement and increase substantially the costs of conflict resolution"). Fisher and Ury write:

In the English language, "face-saving" carries a derogatory flavor. People say, "We are doing that just to let them save face," implying that a little pretense has been created to allow someone to go along without feeling badly. The tone implies ridicule.

This is a grave misunderstanding of the role and importance of face-saving. Face-saving reflects a person's need to reconcile the stand he takes in a negotiation or an agreement with his principles and with his past words and deeds.

FISHER & URY, supra note 1, at 28.

vacillating, indecisive manager, many leaders will refuse to admit to themselves or others that they have made a mistake. Instead, they will redouble their efforts in pursuing the original plan.²¹⁹ The final cause is competitive irrationality—the authors describe this situation as one in which two parties engage in behavior that is clearly irrational in terms of the expected outcomes to both sides, yet where it is hard to identify specific irrational actions by either party.²²⁰ That is, each party feels that what he or she is doing is rational, failing to recognize that the rise of competition means that both parties will lose if the battle escalates. For example, in the previously described Dollar Auction, participants typically seize on the opportunity to obtain a dollar at a profit if no one else bids. Once a competitor enters the picture, however, competitive juices will drive the bidding to a dollar, driving away any possibility of profit. One then faces both the loss of face and no profit. To avoid losing face and to reduce the financial loss, bidders quickly escalate the bidding beyond the value of the dollar. Needless to say, both parties feel the same pressures and the bidding typically escalates quickly. When the bidding is only for a dollar, matters usually get resolved with a minimum of fuss. Unfortunately, when business mergers are at stake, the losses to negotiators can be in the hundreds of millions of dollars.

E. Sunk Cost Bias

One of the simplest biases to see, and yet one of the most difficult to avoid, arises with respect to "sunk costs." Sunk costs are those that, once expended, cannot be retrieved. In the abstract, most people understand that one cannot justify future investments on the basis of previous expenditures, however large. To the contrary, future investments must be justified on the basis of future returns, not past expenditures.²²¹ For example, other things

²¹⁹ Bazerman and Neale offer several suggestions for retaining the flexibility to reverse bad decisions. First, managers must convey throughout their organizations that saving face must never come at the expense of good decisions. Second, organizations should constantly strive, through the dispensing of rewards, to make employees' values consistent with those of the organization. Bazerman & Neale, *supra* note 212, at 167.

²²⁰ Id.

²²¹ Sometimes, of course, enormous sunk costs cannot be avoided, even though they do not lead to profitable ventures. For example, firms in the pharmaceutical industry regularly expend millions of dollars developing drugs that, for one reason or another, will not be approved for sale by the Food and Drug Administration. Similarly, petroleum companies regularly drill "dry holes" that contain no significant oil reserves. The key is whether they have the capability of stopping a venture once it is evident that it will prove

being equal, a rational actor faced with two competing projects—one that requires \$50 in future investment versus one that requires \$100—that promise to return \$1,000 in profit should choose the \$50 option irrespective of the costs that he or she has already incurred. Yet, it is highly likely that one who has already sunk \$200 in the more expensive alternative, even if it promises to cost more in the future, will persist in pursuing that scheme. Sunk costs lead people astray for many of the same reasons that people escalate their commitments to previously selected courses of action. Their perceptions become biased towards seeking confirmatory data in support of their original plan and their fear of appearing foolish drives them to stay the course. So strong and instinctual is the "sunk cost" bias that it will invariably defeat the "rational" behavior predicted by classical economics theory.

Sunk costs present concerns when they lead people to pursue courses of action that diminish their profits. Lives as well as profits can be lost when sunk costs dominate one's thinking.²²⁴ Undoubtedly, the most extreme

unprofitable. This can be an extraordinarily complex decision although the basic principle of "sunk costs" is fairly simple.

²²² For detailed discussions of the "sunk cost" bias, see, for example, Gary Belsky, Get Smart: Behavioral Economics Applies the Dismal Science to People Questions, 1 GALLUP MGMT. J. 25, 26–27 (2001) (describing the "sunk cost fallacy" as "the common habit of justifying past decisions with present ones" and reporting on studies that illustrate the phenomenon) and Daphne Main & Carolyn L. Lousteau, Don't Get Trapped, 81 STRATEGIC FIN. 56, 56, 58 (1999) (pointing out how sunk costs can "trap" financial managers in projects). See generally Hal R. Arkes & Peter Ayton, The Sunk Cost and Concorde Effects: Are Humans Less Rational Than Lower Animals?, 125 PSYCHOL. BULL. 591, 591 (1999) (describing the "sunk cost" effect as "a maladaptive economic behavior that is manifested in a greater tendency to continue an endeavor once [a substantial] investment . . has been made [in it]").

²²³ Jolls et al., cite a clever study that dramatically illustrates this effect:

The traditional assumption about sunk costs ... generates invalid predictions. Here is one: A theater patron who ignores sunk costs would not take into account the cost of a prepaid season pass in deciding whether "to rouse himself... to go out" on the evening of a particular performance; the decision would be made purely on the basis of the benefits and costs from that moment forward. However, in a study of theater patrons ... [those] who received discounts were found to attend significantly fewer performances than those who did not receive discounts, despite the fact that (due to random assignment) the benefit-cost ratio that should have mattered—benefits and costs going forward—was the same on average in the two groups [A]gain, the standard [economics] prediction proved invalid.

Jolls et al., supra note 7, at 1482-83 (citations omitted).

224 One of the most tragic illustrations of this is the case of Dr. Alfred Steinschneider, a pediatrician whose medical career rested, in large part, on his theory that Sudden Infant Death Syndrome (SIDS) can occur repeatedly within families. Dr.

examples of sunk costs driving further, often foolish, actions are those connected with war. Leaders invoke the casualties of the past to justify otherwise unjustifiable future sacrifices. Adolf Hitler, for example, embittered by Germany's catastrophic losses in World War I, would largely justify his aggressive war efforts in World War II to avenging these losses.²²⁵

On a less dramatic scale, negotiators need always be on guard against sunk cost reasoning when they find that an adversary has goals and interests that fail to overlap with their own. In cases where an opponent insists on an agreement that is actually worse for the negotiator than if no deal is struck, negotiators need to always keep the "no deal" option in mind. This is especially so where negotiators have invested substantial time and energy in past bargaining.²²⁶

F. "Fixed-Pie" Bias

A comment by a congressman during the Cold War about the SALT treaty dramatically illustrates the "fixed-pie" bias. He stated, "I have had a philosophy for some time in regard to SALT, and it goes like this: the Russians will not accept a SALT treaty that is not in their best interest, and it seems to me that if it is in their best interests, it can't be in our best interest." As numerous researchers have pointed out, assuming that one's interests directly conflict with one's opponents is both common—and often wrong. Arguing, for example, that any agreement that makes one country

Steinschneider reached this conclusion based on a case in which he was personally involved where a family allegedly lost five children to SIDS. Dr. Steinschneider stubbornly held to this theory despite the lack of additional confirming data—even despite the eventual conviction of the mother for murdering the five children. See generally RICHARD FIRSTMAN & JAMIE TALAN, THE DEATH OF INNOCENTS (1997).

²²⁵ See JOHN KEEGAN, THE FIRST WORLD WAR 3 (1998) (quoting Hitler in 1922 as saying, "It cannot be that two million Germans should have fallen in vain No, we do not pardon, we demand—vengeance!").

²²⁶ Thus, the necessity for having a "walkaway point," the point at which rejecting a deal constitutes a superior alternative to taking the other side's best offer. See, e.g., Adler & Silverstein, supra note 110, at 65 (describing a variety of approaches to walkaway points).

²²⁷ The comment was made by Congressman Floyd Spence (R-SC). *See* BAZERMAN, *supra* note 16, at 129 (quoting the Congressman).

²²⁸ See, e.g., BAZERMAN, supra note 16, at 128–29 (calling for "[c]reative agreements" that "lie outside the false assumption that the pie is fixed"); THOMPSON, supra note 1, at 9 (noting that most negotiators—about 80%—"view negotiation as a situation in which parties' interests are completely opposed"); Carroll et al., supra note 5, at 354 (noting that bargainers often begin negotiations with the assumption that "the 'pie'

strong necessarily must weaken its adversary is simplistic thinking at best, and misguided at worst. For example, trade agreements that bolster the economies of two countries will strengthen both without diminishing the interests of either.²²⁹ Even in the realm of military agreements, one can make the case that pursuing one's interests to the complete disregard of an adversary's interests rarely results in one's long term gain. Few better examples exist than the bitter legacy of World War I resulting from the onerous settlement imposed on Germany by the victorious Allies in 1918. Far from promoting the Allies' interests, this agreement ultimately led to the horrors of World War II.²³⁰ In fact, numerous studies demonstrate that, other things being equal, powerful parties often find reaching agreement with weaker parties to be extremely difficult, reflecting the hazard of overreaching in pursuing one's interests.²³¹

is fixed" and therefore "adopt a win-lose orientation"); Gelfand & Christakopoulou, supra note 207, at 249 (describing the fixed-pie error as "a judgment bias in which negotiators fail to accurately understand their counterparts' interests"); Pinkley et al., supra note 7, at 101 (noting that negotiators often incorrectly assume that "the issues of greatest importance to them are also the issues of greatest importance to the other party").

²²⁹ In fact, according to columnist Tom Friedman, countries that view each other as antagonists should work to promote prosperity for each other. Once both countries achieve a certain level of well-being, the chances of conflict diminish dramatically. Friedman describes this theory as the "Golden Arches Theory of Conflict Prevention," which briefly stated is as follows: "No two countries that both have McDonald's restaurants have fought a war against each other since each got its McDonald's." Thomas L. Friedman, The Lexus and the Olive Tree 195 (1999). As described by Friedman: "[My theory] stipulated that when a country reached the level of economic development where it had a middle class big enough to support a McDonald's network, it became a McDonald's country. And people in McDonald's countries didn't like to fight wars anymore, they preferred to wait in line for burgers." *Id.* at 196. Although occasional exceptions have cropped up, Friedman's theory remains highly predictive. *Id.* at 252–53.

²³⁰ See KEEGAN, supra note 225, at 423–24 (arguing that "[t]he Second World War was the continuation of the First, and indeed it is inexplicable except in terms of the rancors and instabilities left by the earlier conflict [H]umiliated by a compulsory disarmament that reduced its army to a tiny gendarmerie, dissolved its battlefleet altogether and abolished its air force, and blackmailed by the continuation of starvation through blockade into signing a humiliating peace treaty, republican Germany came to nurture grievances stronger by far than those that had distorted its international relations and domestic politics before 1914.").

²³¹ See, e.g., JEFFREY Z. RUBIN & BERT R. BROWN, THE SOCIAL PSYCHOLOGY OF BARGAINING AND NEGOTIATION 199 (1975) (basing observations on a review of 27 studies on power symmetry, the authors conclude that "equal power among bargainers tends to result in more effective bargaining than unequal power"). The studies demonstrate that too often the party with greater power tends to behave manipulatively and exploitatively, resulting in extreme submission by the weaker party. *Id.* at 221.

One of the great sources of error behind the "fixed-pie" bias is the belief that the issues most important to oneself are also the most important to one's opponents. Even when the issue is money, one can too quickly leap to the conclusion that this is all that matters to one's adversary when other issues may have equal, or at least substantial, importance. For example, a consumer negotiating to purchase a car, while obviously concerned about paying too much, will likely be as concerned about the quality of the automobile, the reliability of the dealer's service department, and the overall honesty of the seller. Similarly, the dealer, while clearly concerned about maximizing its profit, may also worry about the consumer's willingness to provide repeat business, likelihood of complaining about minor defects, or flexibility as a service customer. All of these factors will tend to mitigate and attenuate the issue of price, although price will obviously be important. Assuming that price, however, will be the only matter at issue tends to undermine the overall quality of the agreement reached for the sale of the car. This becomes increasingly critical the more that agreements pertain to long-term relationships.²³²

The "fixed-pie" bias is particularly difficult to address because it tends to persist even after negotiators are presented with accurate information about their counterparts' interests.²³³

G. Framing Bias

Sales people have long known that how one characterizes a deal may well determine its acceptability to the other side. The more favorably one "frames" the terms for a customer the more likely he or she is to reach an agreement. Framing a deal is to be distinguished from "sweetening" the terms of a deal. The latter concerns providing better terms, e.g., lowering the price of an item; the former addresses how one paints a picture of the deal without necessarily improving its terms. For example, clothiers will

Making a weaker party feel demeaned undermines the climate for agreement because, as Professor Stephen McJohn notes, when weaker parties feel demeaned, they "may become unable to agree to a transaction that gives them what they actually want, simply because such agreement would cause loss of status." See Stephen M. McJohn, Default Rules in Contract Law as Response to Status Competition in Negotiation, 31 SUFFOLK U. L. REV. 39, 47 (1997).

²³² See Carroll et al., supra note 5, at 354 (arguing that, "[a]s negotiators become more experienced and sophisticated, they learn over time to relax the "fixed pie" assumption in order to reach integrative solutions").

²³³ See Gelfand & Christakopoulou, supra note 207, at 251.

invariably try to sell a customer the costly item first and then move to the less expensive item. As Professor Cialdini explains:

Common sense might suggest the reverse: If a man has just spent a lot of money to purchase a suit, he may be reluctant to spend very much on the purchase of a sweater. But the clothiers know better.... Sell the suit first, because when it comes time to look at sweaters, even expensive ones, their prices will not seem as high in comparison. A man might balk at the idea of spending \$95 for a sweater, but if he has just bought a \$495 suit, a \$95 sweater does not seem excessive. 234

Framing becomes even more critical when the issue becomes one of losses avoided versus gains made. As previously noted, people are moved more to avoid losses than to acquire gains—roughly speaking, they are twice as unhappy with losses as they are happy with equivalent gains.²³⁵ Accordingly, how one views a transaction may very well determine whether he or she is willing to enter into a deal. One who purchased a house for \$120,000 and who has listed it for \$200,000 may well receive an offer of \$190,000 favorably or not depending on whether one views it as a \$70,000 gain or a \$10,000 loss. This will likely depend on the reference point that one has in mind for what a fair offer for the house should be. This, in turn, may be influenced by how effectively either or both sides "anchor" their first offers. That is, when one has staked out an initial position, that may influence the point around which negotiations revolve even when there is little market justification for the anchor.²³⁶

²³⁴ See CIALDINI, supra note 12, at 13.

²³⁵ See Sunstein, supra note 7, at 1179 (noting that "[p]eople are especially averse to losses. They are more displeased with losses than they are pleased with equivalent gains—roughly speaking, twice as displeased. Contrary to economic theory, people do not treat out-of-pocket costs and opportunity costs as if they were equivalent.").

²³⁶ See supra notes 102–14 and accompanying text; see also BAZERMAN, supra note 16, at 132. Bazerman notes the significance of positive anchors:

What determines whether a negotiator will have a positive or negative frame? The answer lies in the selection of a perceptual anchor. Consider the anchors available to a union negotiator in negotiating a wage: (1) last year's wage, (2) management's initial offer, (3) the union's estimate of management's reservation point, (4) the union's reservation point, or (5) your bargaining position that has been publicly announced to your constituency. As the anchor moves from 1 to 5, what is a modest gain in comparison to last year's wage is a loss in comparison to the publicly specified goals, and the union negotiator moves from the positive frame to a negative frame. In order to avoid the adverse effects of framing, negotiators should always be aware of their frames and examine alternative frames.

Knowing how frames affect the attractiveness of offers to negotiators can help in bargaining situations. When one seeks to move the other side to make concessions, one needs to point to the positive aspects of the deal that will result and to avoid extensive discussion about how small the concession is to reach agreement. What is small to one side will likely loom as a much larger loss to the other. So, for example, rather than argue, "Look, Joe, I'm only asking you to lower the price by \$10,000 to \$40,000," one might do better by defining an effective anchor point and then pointing to the benefits that the other side will realize from there: "Joe, I was only prepared to pay \$30,000, but you've convinced me to up my offer to \$40,000 because you're a tough bargainer and because your product is so good."²³⁷

Sales present a particular challenge because sellers typically frame the transaction as one in which they stand to gain from the transaction whereas buyers often view sales as a situation in which they will give up, i.e., lose something.²³⁸ Asking someone to absorb a psychological loss compared to making a gain means, other things being equal, that buyers should be more hesitant to enter into deals than sellers. This, in turn, should mean that sellers will have to provide a premium in order to draw buyers into sales. In fact, recent studies confirm that buyers tend to do better in negotiated deals than sellers.²³⁹

H. Hindsight Bias

Of the many biases that people face in their daily lives, the one they most immediately know and recognize is hindsight bias. Hindsight bias occurs when people make or would have made a particular prediction about an event. If, in the meantime, they discover the correct judgment, their memory of their own judgment changes to accord with the new information. Revising one's past estimate typically occurs unconsciously. One does not necessarily alter the past knowingly; rather, one revises his or her recollection toward the

²³⁷ See id. Bazerman, in particular, suggests this as a strategy; "The framing effect suggests that in order to induce concessionary behavior in an opponent, a negotiator should always create anchors that lead the opposition to a positive frame and negotiate in terms of what the other side has to gain." *Id*.

²³⁸ See Neale et al., supra note 185, at 231 (noting that this seems "especially likely if a product or service of indeterminate value is being exchanged for something of quite determinate value—for instance, money").

²³⁹ Id.; see also BAZERMAN, supra note 16, at 132 (noting that a "curious, consistent, and robust finding is that buyers tend to outperform sellers in symmetric negotiation experiments").

new reference point because it looms so strongly in one's mind.²⁴⁰ Although the hindsight tendency arises in part simply because people like to think of themselves as perceptive and prescient thinkers, basic cognitive processes probably explain why it is so powerful and ubiquitous.²⁴¹ That is, because the actual outcome appears so likely from hindsight, one assumes that one saw it all along.

Unfortunately, real-life decisionmakers and negotiators must take action ex ante, based on available information and without the benefit of hindsight. This presents serious problems when they are judged by their colleagues, managers, or the courts, each of whom assesses their actions ex post without necessarily being able to put themselves in the decisionmakers' shoes. This then gives rise to unduly critical assessments of the difficult decisions that people must make.²⁴² For example, physicians asked to assess the probabilities of alternative diagnoses, given a set of symptoms, offer significantly different estimates depending on what they are told the ultimate diagnosis turned out to be.²⁴³ Similarly, studies suggest that juries apply

Cognitive processes are believed to be the most powerful sources of hindsight bias. Individuals who are given outcome information are believed to assimilate it with the limited information that they already know to build a coherent story. When they are given information about a bad outcome, they "rewrite the story" so that the beginning and middle provide a causal explanation for what they now know to be the end. Thus, they build a story from back to front. Thereafter, they view the actual outcome as natural and find it difficult to see how alternative outcomes could have occurred.

Peters, supra note 167, at 1286.

²⁴⁰ See generally Ed Bukszar & Terry Connolly, Hindsight Bias and Strategic Choice: Some Problems in Learning from Experience, 31 ACAD. MGMT. J. 628 (1988); Dagmar Stahlberg et al., We Knew It All Along: Hindsight Bias in Groups, 63 ORG. Behav. & Hum. Decision Processes 46 (1995).

²⁴¹ As Professor Peters explains it

²⁴² *Id.* at 1287 (noting that hindsight bias "makes the outcome seem more predictable than it actually was and can produce unfair judgments about the culpability of the conduct that gave rise to the outcome"); *see also* BAZERMAN, *supra* note 16, at 38 ("Claiming that what has happened was predictable based on foresight knowledge puts us in the position of using hindsight to criticize another's foresight judgment. However, the hindsight bias reduces our ability to learn from the past and to evaluate objectively the decisions of ourselves and others.").

²⁴³ See Hal R. Arkes et al., Eliminating the Hindsight Bias, 73 J. APPLIED PSYCHOL. 305, 306 tbl. 1 (1988).

hindsight bias in negligence cases, likely leading to more findings of negligence than may, in fact, actually occur.²⁴⁴

Identifying our proclivity towards hindsight bias is one thing. Doing something about it is quite another. Various researchers have despaired over its seeming intractability,²⁴⁵ due no doubt to its evolutionary hard-wiring.²⁴⁶ However, some strategies for offsetting, or "debiasing," have been tried, with various degrees of success. While merely alerting people to the existence of the hindsight bias does not seem to produce a positive effect,²⁴⁷ asking test subjects to contemplate alternative outcomes and assign probabilities to the different outcomes seems to reduce the bias.²⁴⁸ Similarly, forcing people to

[H]indsight can be helpful. Indeed, when it comes to risk management, it is a mistake to talk about a hindsight bias since ex post risk estimates are likely to be more accurate than ex ante estimates. For example, estimates of the risk of launching the Challenger space shuttle in cold weather were probably far more accurate after it exploded than they were before the tragic event. Once an event thought to be extremely rare happens, unless one has very good data to the contrary, one should revise upwards estimates of the likelihood the event would happen. Certainly, from a risk management standpoint the costs of failing to take precautions against the event should be similarly raised.

Richard Lempert, Juries, Hindsight, and Punitive Damage Awards: Failures of a Social Science Case for Change, 48 DEPAUL L. REV. 867, 874 (1999) (emphasis added).

²⁴⁴ See, e.g., Jolls et al., supra note 7, at 1523 and citations therein (noting that "[h]indsight bias will lead juries making negligence determinations to find defendants liable more frequently than if cost-benefit analyses were done correctly—that is, on an ex ante basis. Thus, plaintiffs will win cases they deserve to lose."). Professor Lempert, however, although conceding the possibility of a hindsight bias, also argues that:

²⁴⁵ See, e.g., BAZERMAN, supra note 16, at 168 (citing research on the hindsight bias showing that "even when biases are explicitly described to participants and they are asked to avoid the bias, the bias remains"); Reid Hastie & W. Kip Viscusi, What Juries Can't Do Well: The Jury's Performance as a Risk Manager, 40 ARIZ. L. REV. 901, 916 (1998) (concluding that "[n]o general remedies are known for hindsight effects"); Kim A. Kamin & Jeffrey J. Rachlinski, Ex Post ≠ Ex Ante: Determining Liability in Hindsight, 19 LAW & HUM. BEHAV. 89, 99–102 (1995) (finding that a judge's caution to jurors about hindsight dangers had no apparent effect).

²⁴⁶ See Hastie & Viscusi, supra note 245, at 914–15 (arguing that putting aside hindsight biases is difficult because "it is likely that our capacities to make judgments under uncertainty were designed by evolutionary selection to operate in a forward-looking, predictive fashion").

²⁴⁷ Kamin & Rachlinski, *supra* note 245, at 89.

²⁴⁸ Peters, *supra* note 167, at 1287–88.

contemplate alternative outcomes and to explain how they could have come about also seems to work.²⁴⁹

I. "Winner's Curse"

Observers of auctions in which numerous parties are involved point out an interesting phenomenon. Virtually everyone who submits a winning bid ends up paying too much.²⁵⁰ One of the simplest illustrations of this phenomenon is when researchers fill a jar with \$8 worth of coins and then solicit sealed bids from classes of students. Invariably, the winning bid exceeds the value of the coins although the class, when asked separately to estimate the value of the coins, underestimates their value.²⁵¹ Unfortunately, this phenomenon is not limited to classroom auctions. It also applies to virtually anything that is placed in an auction. For example, when the federal government auctioned off broadcast spectrum rights to the public, the government received almost \$23 billion in revenue, with virtually all observers noting that most of the bidders overpaid. Yet, this occurred in auction after auction.²⁵²

Why does the winner's curse occur so often and easily? Simply put, one who knows that others are bidding for an item realizes that in order to win he or she must bid aggressively. Where there are a large number of bidders, someone almost always overestimates the true value of the item and overbids. Those who bid rationally usually end up with losing bids. Combating the winner's curse presents serious challenges. The soundest way

²⁴⁹ Id. at 1289 ("To summarize, most of the studies indicate that forcing subjects to think concretely about all possible outcomes reduces the hindsight bias markedly. This activity primes cognitive processes that would otherwise not be stimulated and, thus, 'new causal skids are greased."").

²⁵⁰ See, e.g., Peter Coy, Going, Going, Gone... Sucker!, BUS. WK., Mar, 20, 2000, at 124, 124–125 (describing how the winner's curse afflicts "newbies" on online electronic auctions). See generally Peter Foreman & J. Keith Murnighan, Learning to Avoid the Winner's Curse, 67 ORG. BEHAV. & HUM. DECISION PROCESSES 170 (1996) (noting that the winner's curse is pervasive and highly resistant to learning); Richard Thaler, The Winner's Curse, 29 ACROSS THE BOARD 30 (1992).

²⁵¹ See Thaler, supra note 250, at 31 (demonstrating that, in one series of experiments, the winning bids averaged \$10.01, whereas the class estimate of the coins' value averaged \$5.13).

²⁵² See Stephen Maloney, Winners' Curse: Why Spectrum Bidders Overpaid, 135 PUB. UTILITIES FORTNIGHTLY, Oct. 15, 1997, at 31, 31–32.

²⁵³ See Thaler, supra note 250, at 31 (noting that the "winner of the auction is likely to be a loser").

to do so is to gather as much information about what is up for bid and to stick with one's estimate, especially when the bidding exceeds one's beginning estimate.²⁵⁴

VI. THE POSSIBILITIES FOR REMEDIATION

If, as the author and others believe, heuristics and the other negotiation biases are firmly lodged within the human psyche,²⁵⁵ one must ask whether there are steps that can be taken to avoid their pitfalls while preserving their benefits. There is no simple answer to this question, because the various heuristics and biases present different challenges. Certainly, some seem more susceptible to identification and correction than others.²⁵⁶ But, overall, a few caveats are in order.

First, although there seems little doubt that negotiation and decision biases exist, advancing remedies for dealing with them requires a reasonably clear understanding of how they arise and the settings within which they flourish. Unfortunately, most research into cognitive biases has been done on captive or paid student volunteers in artificial settings somewhat unrelated to the real world,²⁵⁷ capturing perhaps the existence of the biases but missing

²⁵⁴ See BAZERMAN, supra note 16, at 139 (advising that, to protect oneself, one needs "to develop or borrow professional expertise to balance the inequity of information [between the seller and the bidding buyer]"); Coy, supra note 250, at 124 (advising that the "soundest way to dodge winner's curse is to gather more information about the true value of what's being sold").

²⁵⁵ A particularly disturbing example can be found in the tragic death of a highly-renowned negotiation scholar, Jeffrey Z. Rubin. Despite his scholarly insights into how people will escalate their commitment to a previously-decided course of action even to unreasonable extremes, Dr. Rubin perished in a climbing accident because he insisted on continuing even though his partner turned back in the face of extreme weather. See BAZERMAN, supra note 16, at 70; see also Birke and Fox, supra note 7, at 19 (observing that "egocentric biases may be very difficult to eliminate"); Carroll et al., supra note 5, at 353 (indicating that "substantial evidence exists to demonstrate that ... judgmental deficiencies affect expert negotiators as well as naive subjects"); Thompson & Kim, supra note 7, at 3 (noting how, even when negotiators have a specific bias, such as the fixed-pie perception, they still fall prey to it).

²⁵⁶ See infra notes 276–337 and accompanying text.

²⁵⁷ See, e.g., BAZERMAN, supra note 16, at 165 (noting that many of the biases examined in his book "have been tested on student samples, with participants who were not being rewarded for accurate performance and who were making decisions in task domains with which they were unfamiliar"); Richard E. Redding, How Common-Sense Psychology Can Inform Law and Psychologal Research, 5 U. CHI. L. SCH. ROUNDTABLE 107, 125 (1998) (noting that "it is still the case that much psychologal research uses

their full contours and critical subtleties.²⁵⁸ It may, for example, be useful to know that individuals in an experimental setting exhibit overconfidence and excessive optimism when predicting the results of a negotiation.²⁵⁹ Whether this trait arises to the same extent in real-life negotiations where actual money, power, prestige, and status are involved is generally unknown.²⁶⁰ Intuitively, one might conclude that insecurity and lack of confidence seem as likely as overconfidence.²⁶¹

Second, even if one overlooks the limits of the quality of research into decision biases, one finds few useful studies into methods for remedying

artificial laboratory tasks and situations, with volunteers or a convenient sample of college students who may not have the same characteristics as the general population").

258 Mitchell voices particular concern about the failure of researchers to note the extreme variability in laboratory research results depending on a host of often ignored factors:

Even inside the relatively controlled environment of the laboratory, we see considerable variation in cognitive performance among individuals depending on their cognitive abilities, educational background, and affective state. As experimental conditions change to incorporate greater social context, such as accountability constraints and financial incentives, we see further variation in performance. These qualifying statements may not be very popular as legal decision theory tries to flex its explanatory and predictive muscles and increase its sphere of influence, but failing to take these empirical boundary conditions into account leaves legal decision theory in no better an empirical position than the economic models of rational legal behavior that the legal decision theorists criticize.

Mitchell, supra note 6, at 137-38; see also Redding, supra note 257, at 125 (observing that, "[c]ompared to problems constructed in the laboratory, real-world problems exist in a far larger and more complex context involving complicated interactions between variables, contexts, and tasks that are difficult to isolate, quantify, and control"); Koehler, supra note 89, at 2 (challenging a widely held view about biased decisionmaking and arguing that researchers' understanding of the phenomenon is "unlikely to increase substantially from examining the results of additional laboratory experiments that search for performance errors.... Instead, a more ecologically valid program of research must be pursued. Such a program would examine base rate usage in a variety of real world domains...").

259 See, e.g., Bazerman et al., supra note 7, at 1288-89 (noting that "[i]ndividuals tend to believe that they are correct—and overestimate the correct probability of their accuracy," and citing numerous studies about how negotiators tend to enter into negotiations in an overconfident state).

²⁶⁰ See, e.g., Leigh Thompson & Reid Hastie, Social Perception in Negotiation, 47 ORG. BEHAV. & HUM. DECISION PROCESSES 98, 100 (1990) (noting that the general conclusion of laboratory studies is "that negotiators make systematic judgment errors which lead to inefficient bargaining behavior and outcomes. However, the existence of these judgment errors is largely speculative; they have not been directly measured.").

²⁶¹ See supra notes 167–68 and accompanying text.

these biases.²⁶² One commentator theorizes that this is because psychologists have been so focused on refuting the "rational choice" theories of economics that they have spent little time developing and refining their decision bias theories.²⁶³ Although the lack of empirical studies leads one to offer tips for avoiding negotiation bias cautiously, I believe that the substantial literature on effective negotiation, much of it empirically based, provides a foundation for providing useful advice.²⁶⁴ For example, the almost-universal focus of negotiation scholars on the need for (and methods of) careful preparation undoubtedly offers an extremely relevant and rich source of advice for avoiding decision biases.²⁶⁵

Third, ostensibly irrational responses may not always reflect poor thinking. To the contrary, they may show analytical subtleties that, while not purely rational, may be quite sound. For example, research shows that people who are told that, of 400 patients who undergo a certain operation, 350 are alive after five years, will be much more willing to undergo the operation than people who are told that of 400 patients who undergo the operation, 50 are dead after five years. ²⁶⁶ Professor Cass Sunstein challenges the automatic assumption that the different reactions demonstrate inherent irrationality. According to him, "this effect may reflect not confusion about expected value, but instead the social meaning of the statement; when a person says that a certain number will die, he may be signaling something about the nature of the option, and the signal may be different from the

²⁶² See supra note 22 and accompanying text.

²⁶³ See Rachlinski, supra note 20, at 1175 (suggesting that "[t]he field has done more to identify and support the prevalence of deviations from rational choice theory (and on 'converting' economists) than to develop and test its own models. This focus has impaired the field to some extent, leading to the impression that it is a collection of errors that seem to sprout up, as one recent paper put it, like 'weeds in a vacant lot.'").

²⁶⁴ Social psychologists and other empirically-based researchers have studied negotiation issues for many decades and have offered numerous suggestions for effective bargaining. Among the names that come to mind from the field: Max Bazerman, Daniel Kahneman, Aaron Tversky, Leigh Thompson, and Margaret Neale. Their research has formed the basis for texts that provide excellent negotiation advice. One of the best examples of this is the book by Professor Richard Shell, BARGAINING FOR ADVANTAGE: NEGOTIATION STRATEGIES FOR REASONABLE PEOPLE, *supra* note 1. Professor Shell offers clear, useful advice derived from an exhaustive review of the empirical literature. To underscore the point, he devotes 24 pages in his book to a list of the studies upon which he relied.

²⁶⁵ See infra notes 290–308 and accompanying text. If biases arise from the lack of careful thought, effective planning methods logically offer effective counterpoints.

²⁶⁶ See Donald A. Redelmeier et al., Understanding Patients' Decisions: Cognitive and Emotional Perspectives, 270 JAMA 72, 73 (1993).

(mathematically equivalent) statement that a certain number will live."²⁶⁷ In other words, good decisions may not always be logical. In fact, applying pure logic may lead to less useful decisions than those that include emotional elements as well.²⁶⁸

Fourth, biases in real-life do not operate in isolation. Some biases seem to offset each other, leading to the conclusion that simple fixes may increase, rather than decrease, errors. For example, Professor Philip Peters notes that biases favoring defendants in courtroom trials may well balance (or even cancel) the biases that favor plaintiffs.²⁶⁹ Similarly, Professor Rachlinski suggests that political players who use cognitive biases to promote their political agendas are quite likely to face opponents who do the same thing in the opposite direction.²⁷⁰ Whether there is a proportional offset is not clear,

[T]he human reasoning process may lead to conclusions that are useful and intuitively correct, even though they must be considered erroneous in formal logic. This will be reliably true when the logically correct solution is less likely to be useful. For instance, it does not follow logically that playing Russian roulette will harm you. So the avoidance of such a game is not logically justified. Needless to say, it is advisable in a practical sense. People are much better at solving problems with the emotional content provided by certain kinds of human interactions. A problem of guarding against unfair exploitation in social interactions, such as an officemate's pretending to be sick to avoid some unpleasant duty, may be more easily and rapidly solved than what is formally the same problem without the emotional baggage of unfairness.

WILLIAMS, *supra* note 24, at 162–63. Williams argues that "[r]easoning, to be favored by selection, must lead to useful conclusions that help us survive and reproduce. It need not lead to formally correct solutions to logical problems." *Id.* at 162.

²⁶⁹ See Peters, supra note 167, at 1278 (arguing for caution in deriving policy judgments for the judicial system from the existence of biases by pointing out that "attributes that favor defendants include juror distrust of plaintiffs' motives, the obstacles that victims face in bringing their claims to court, and the presence of cognitive biases that favor defendants, such as anchoring and defensive attribution. These advantages may already offset any benefit conferred upon plaintiffs by hindsight bias."). Similarly, studies suggest that certain biases may carry "mirror" images of themselves, producing pressures in directly opposing directions on decisionmakers. See, e.g., Rachlinski, supra note 32, at 746 (citing studies indicating "that people understate the dangers posed by hazards that have a low probability of occurring, while other studies indicate that people overstate the dangers posed by such hazards").

[p]olitical actors take advantage of the availability heuristic to create public pressure in support of their preferred policy goals. These "availability entrepreneurs" work to keep sensational stories designed to influence public perception and opinion in the

²⁶⁷ See Sunstein, supra note 7, at 1179 n.16.

²⁶⁸ Professor George Williams cites research showing that:

²⁷⁰ See Rachlinski, supra note 20, at 1205. Rachlinski notes that, in some instances,

but the fact that conflicting biases play a role in decisionmaking means that eliminating one decision error while leaving its countervailing bias untouched will make things worse, not better. How often this "balance of bias" phenomenon occurs is unclear, but it presents a concern.²⁷¹

Fifth, simplistic attempts to mandate dramatic policy shifts to counter perceived decision biases appear unlikely to succeed, and may produce unforeseen adverse consequences. To illustrate; one hotly debated area in the law revolves around punitive damage awards in tort cases. Professors Reid Hastie and W. Kip Viscusi invoke decisionmaking bias research to justify new rules. They argue for a system in which judges rather than juries decide punitive damages because "[juries] overreact to risks associated with new technologies; to risks that represent increases from accustomed, status quo risk levels . . . outside of their personal control; and to risks associated with highly publicized events."²⁷² However, they have been strongly challenged by Professor Richard Lempert, who notes that "novel" risks may well necessitate "special care" on the part of producers, justifying the wisdom of juries—"[a] jury which shares values firmly embedded in the political system is not, on this account, an irrational actor."²⁷³

news media. If this argument is correct, then cognitive biases cancel each other out in the marketplace of ideas because groups can find vivid, sensational stories that will have an exaggerated effect on the political process.

Id.

 271 Id. at 1211 (expressing doubt about whether an optimism bias presents a net social liability). Professor Rachlinski observes that

[t]he social costs of...three out of four [business] failures are surely high and commensurate with the costs of foolish bank loans and speculative dot-com startups, but it is hard to know whether these costs are outweighed by the benefits of a determined optimism that pervades most business ventures. Because of this uncertain balance, scholars who have considered the problem come to no resolution.

Id.

The authors also suggest... that people overreact to risks associated with new technologies, to risks that increases [sic] status quo risk levels, and to risks associated with highly publicized events. With respect to the first two, it seems difficult to know whether people overreact because when we have little experience with a risk, it is hard to know what the appropriate reaction is. A jury which expects special care when risks are novel is not acting improperly, for a similar perspective operates in various regulatory arenas, as in, for example the special requirements, arguably not justified on efficiency grounds, that new drugs must meet before they are marketed. A jury which shares values firmly embedded in the political system is not, on this account, an irrational actor....

²⁷² See Hastie & Viscusi, supra note 245, at 912.

²⁷³ See Lempert, supra note 244, at 890. According to Lempert:

What makes this debate relevant to the current inquiry is Hastie and Viscusi's conflation of a heated policy dispute with the scientific correction of human reasoning errors. The former involves choosing values, assessing evidence, and making painful tradeoffs. The latter, although not entirely excluding these decision elements, focuses more on the neutral application of tried-and-tested scientific techniques. As Lempert correctly points out, however, excluding juries from assessing punitive damages cannot be resolved simply by noting that juries *might* use hindsight reasoning.²⁷⁴ In fact, recent studies seem to contradict Hastie and Viscusi's assumption that judges would reach different results from juries, leading one to conclude that prudence dictates cautious reform, even when real cognitive problems have been identified.²⁷⁵

Finally, and a point especially important for negotiators, one should consider that purely "rational" approaches to decisionmaking can lead to severe blunders equal to, if not occasionally greater than, errors associated with less rational approaches. For example, in 1994, Intel Corp. undertook a classic engineering response when confronted with evidence that its new Pentium computer chip contained a circuit flaw that produced errors in certain mathematical calculations. After careful analysis, Intel's managers concluded that the odds of error were so small for consumers other than scientists and mathematicians that they could not justify replacing them for most computers. In a purely empirical, technical sense, this conclusion was probably a correct one. Unfortunately, the company did not reckon with the consumer reaction to this "rational" decision. In fact, Intel immediately met heated objections from its customers protesting the unfairness of the company's decision despite, a lack of documentation that the flawed chip had harmed them. Facing a firestorm of protest, the company quickly reversed its

Whether juries overestimate the *ex ante* risks associated with highly publicized events is hard to say. It is, despite the authors' suggestion, not at all clear that juries in the asbestos cases have overestimated the risks that the companies mining and using asbestos would have perceived had they tried responsibly to gather information on the safety of their product.

Id. at 890-91.

²⁷⁴ Id.

²⁷⁵ See William Glaberson, A Study's Verdict: Jury Awards Are Not Out of Control, N.Y. TIMES, Aug. 6, 2001, at A9 (noting that, despite criticism of juries in awarding punitive damages, "a comprehensive study of nearly 9,000 trials across the country has found that judges award punitive damages about as often as juries and generally in about the same proportions"); see also Mitchell, supra note 6, at 91 (arguing that "broad condemnations of [juries'] inductive, or statistical, reasoning performance are misleading" in view of empirical studies demonstrating that people are better reasoners than critics allege).

decision and issued a formal apology.²⁷⁶ In this case, as in numerous negotiation settings, a course of action founded exclusively on rational analysis without attention to feelings of fairness can result in disaster.

Notwithstanding these caveats, I believe it is possible to improve one's negotiating skills and to lessen the negative impact of the inevitable biases that plague us when we bargain with other people. In this case, "lessen" is the critical word, because our very humanity guarantees that we can never completely overcome all biases in decisionmaking and bargaining.

A. Focus on Critical Thinking Skills

Knowing that people often stray from rational models in decisionmaking and negotiating underscores the importance of understanding rational models of thought and analysis. To that end, philosophers and scientists have spent millennia developing critical thinking techniques that reduce analytic errors and emotional departures from rationality.²⁷⁷ Although none of the techniques is foolproof, they provide extremely useful approaches for avoiding—or halting—error in analysis. Among the key principles in critical thinking are the ability to define key issues, to recognize fundamental assumptions, to analyze evidence, to draw appropriate inferences, and to understand logical consequences.²⁷⁸

²⁷⁶ See, e.g., Elizabeth Corcoran, Intel to Replace Chips; Firm Reverses Itself on Pentium Policy, WASH. POST, Dec. 21, 1994, at A1.

²⁷⁷ See generally Arthur K. Bierman & Robin N. Assali, The Critical Thinking Handbook (1996); Stephen D. Brookfield, Developing Critical Thinkers: Challenging Adults to Explore Alternative Ways of Thinking and Acting (1987); M. Neil Browne & Stuart M. Keeley, Asking the Right Questions: A Guide to Critical Thinking (1990); Edward De Bono, Six Thinking Hats (1985); Thomas Gilovich, How We Know What Isn't So: The Fallibility of Human Reason in Everyday Life (1993).

²⁷⁸ See, e.g., Paul Brest & Linda Krieger, On Teaching Professional Judgment, 69 WASH. L. REV. 527, 539 (1994) (offering a decisionmaking model with the following components: (1) defining the problem, (2) identifying the underlying objectives and assigning priorities, (3) generating alternative solutions, (4) assessing the alternatives in terms of the underlying objectives, (5) selecting the optimal course of action, and (6) implementing and monitoring the decision); Kevin Celuch & Mark Slama, Teaching Critical Thinking Skills for the 21st Century: An Advertising Principles Case, 74 J. ED. FOR BUS. 134, 135 (1999) (noting that "the practice of critical thinking is associated with the following elements of reasoning: purpose of the thinking, key issues or question being considered, assumptions, point of view, evidence, concepts and ideas, inferences or interpretations, and implications or consequences"); Jeff Gold et al., The Role of Argument Analysis and Story Telling in Facilitating Critical Thinking, 33 MGMT.

Critical thinking principles are closely tied to analyzing evidence through the scientific method. One of the most clever applications of the scientific method is from the late Carl Sagan, a renowned astronomer who developed a "baloney detection kit"²⁷⁹ designed to reduce illogical thinking.²⁸⁰ Among the tools in this kit:

- Wherever possible there must be independent confirmation of the "facts."
- Encourage substantive debate on the evidence by knowledgeable proponents of all points of view.
- Arguments from authority carry little weight—"authorities" have made mistakes in the past. They will do so again in the future.
- Spin more than one hypothesis. If there's something to be explained, think of all the different ways in which it *could* be explained....
- Try not to get overly attached to a hypothesis just because it's yours....
- Quantify. If whatever it is you're explaining has some measure, some numerical quantity attached to it, you'll be much better able to discriminate among competing hypotheses. . . .
- If there's a chain of argument, every link in the chain must work (including the premise)—not just most of them.
- Occam's Razor. This convenient rule-of-thumb urges us when faced with two hypotheses that explain the data equally well to choose the simpler.

LEARNING 371, 373 (2002). Gold et al. argue that the most significant elements of critical thinking are:

^{1.} The critique of rhetoric—being able to evaluate the validity or credibility of arguments and/or a general skepticism towards statements and knowledge. For many the ability to evaluate arguments is one of the most important elements of critical thinking, as it is considered to underlie all other forms of critique

^{2.} The critique of tradition—being skeptical of conventional wisdom, "common sense," long standing practices and traditional ways of doing things.

^{3.} The critique of authority—being skeptical of one dominant view and being open to a plurality of views.

^{4.} The critique of knowledge—recognizing that knowledge is never value free and its subjective and contextualized nature.

Gold et al., supra, at 373 (citations omitted).

 ²⁷⁹ See SAGAN, supra note 117, at 210.
 280 Id

 Always ask whether the hypothesis can be, at least in principle, falsified. Propositions that are untestable, unfalsifiable are not worth much.²⁸¹

Sagan and other scientists' advice arises from their commitment to the scientific method, perhaps the most significant tool developed by mankind for advancing verifiable knowledge. Briefly stated, the scientific method requires (1) the observation and description of a phenomenon, (2) a hypothesis that explains the phenomenon, (3) a prediction of future events based on the hypothesis, and (4) the performance of a test to determine the validity of the prediction. Because the scientific method can never indisputably prove anything, one who relies on it always maintains the knowledge derived from the method in a tentative fashion, ever willing to modify one's views based on newly developed information. Although this can be a source of frustration to those who seek life's ultimate verities, negotiators who follow the scientific method are much less likely to fall prey to decision biases and logic traps.²⁸⁴

B. "Know Thyself": The Need for Self-Awareness

Negotiating effectively without falling into psychological traps or stumbling across various decision biases requires, at a minimum, knowing oneself well. Successful negotiation requires effective goal-setting, emotional control, persistence, prudent risk-taking, and a variety of other measures that support rational decisionmaking. Those who lack insight into themselves—their thinking processes and emotional states—stand at a distinct disadvantage when it comes to appropriate analysis. Self-awareness provides

²⁸¹ Id. at 210–11. The last point is crucial. No one can disprove the hypothesis that invisible, undetectable Martians live among us, but Sagan's thesis directs us not to take such hypotheses seriously.

²⁸² For an expanded exposition of the scientific method, see generally René Descartes, Discourse on The Method and Meditations on First Philosophy 1637 (1996); Richard P. Feynman, The Meaning of It All: Thoughts of a Citizen-Scientist (1998); Richard P. Feynman, The Pleasure of Finding Things Out (1999); and Nigel Sanitt, Science as a Questioning Process (1996).

²⁸³ See supra note 282.

²⁸⁴ See Phil Mole, Fallacies and Frustrations: Why Skeptics Dread Conversations with True Believers, 28 SKEPTICAL INQUIRER, Jan.—Feb. 2004, at 30 (decrying the general lack of critical thinking skills necessary to craft good arguments).

an indispensable guide for exercising self-control and for analyzing situations rationally. 285

One useful definition of self-awareness is the ability to monitor one's own thoughts and emotions, with the resultant likelihood of being able to understand and control them.²⁸⁶ Self-awareness and self-control are commonly associated with "emotional intelligence," a characteristic increasingly considered as important for success in life as pure IQ.²⁸⁷

Negotiators who lack self-awareness seem most at risk for falling into perceptual biases and decision traps. Those who cannot sense when they have abandoned rational approaches seem likely prey to irrational approaches. Developing greater self-awareness requires introspection coupled with dispassionate analysis—the ability to assess oneself impartially and neutrally. Although few individuals can look at themselves in a completely objective manner, it is possible to improve one's ability to do so. One of the most effective strategies is to pause to assess one's immediate reaction—one's feelings and thoughts—to proposals or arguments that one's opponent in a negotiation has advanced. One should then try to see the point from the other side's perspective. Doing so removes one from the immediacy of any heuristics that might cloud one's judgment. The point is that heuristics operate in a rapid, shorthand fashion to assist quick decisions. In today's world, however, many decisions do not require immediate responses, so a pause may well permit greater self-exploration and more well-informed decisions.

²⁸⁵ See, e.g., LEWICKI ET AL., supra note 2, at 21 (stating that "your personal qualities and attitudes will be called into play during negotiations, so it is important to assess these traits ahead of time"); NIERENBERG, supra note 1, at 46 (arguing "that [effective negotiation preparation] requires, first of all, intimate knowledge of your self"); PIENAAR & SPOELSTRA, supra note 113, at 161 (noting that "Sun Tzu... stated the following many years before the birth of Christ: 'Know your enemy, know yourself, and you can fight a hundred battles without disaster....' In negotiation, these prophetic statements should be taken to heart. Negotiators should evaluate their own strengths and weaknesses."); THOMPSON, supra note 1, at 4 (stating that "effective negotiators are self-aware"); Celuch & Salam, supra note 278, at 135 (stating that "a key feature of the process of learning to be a competent thinker is the ability to self-assess and continually improve one's thinking").

²⁸⁶ See Daniel Goleman, Emotional Intelligence 47 (1995) ("Self-awareness is not an attention that gets carried away by emotions, overreacting and amplifying what is perceived. Rather, it is a neutral mode that maintains self-reflectiveness even amidst turbulent emotions.... This awareness of emotions is the fundamental emotional competence on which others, such as emotional self-control build.").

²⁸⁷ Id. at 45.

C. Prepare Carefully

Although decision biases and illogical thinking can sometimes undermine even carefully developed negotiation plans, one finds it difficult to imagine succeeding in overcoming these traps without careful preparation. This is borne by the unanimous advice of experts in the field, both academic and practitioner. All strongly advocate careful planning and preparation in negotiation. Preparation necessarily means more than just learning the facts about the issues likely to arise in the negotiation discussions, although that is critically important. It also includes understanding and anticipating the arguments that one's opponent will advance in support of his or her cause. Preparation is about one's interests and goals (and those of one's opponent), the less likely one is to be sidetracked by irrational thinking or psychological traps.

²⁸⁸ See, e.g., KENNEDY, supra note 1, at 47 ("[P]reparation is the key to most of the important negotiations you undertake. It underlies everything you do as a negotiator. It is often the difference between a good deal and an average deal, and, as often, no deal at all."); SCHOONMAKER, supra note 3, at 27 ("Good preparation can mean the difference between success and failure...."); THOMPSON, supra note 1, at 9 ("The most important aspect of negotiation occurs before negotiators ever sit down at the bargaining table. Preparation is the key to effective negotiation."); URY, supra note 2, at 16 ("Most negotiations are won or lost even before the talking begins, depending on the quality of the preparation."); Terry Anderson, Step Into My Parlor: A Survey of Strategies and Techniques for Effective Negotiation, 35 BUS. HORIZONS, May-June 1992, at 71, 75 ("Although it is the least glamorous aspect of the negotiating process, [preparation] is the most important.").

²⁸⁹ See, e.g., URY, supra note 2, at 19 (arguing that "[t]he single most important skill in negotiation is the ability to put yourself in the other side's shoes. If you are trying to change their thinking, you need to begin by understanding what their thinking is"). He continues: "How can you learn about the other side's interests? Try the simple exercise of imagining from their point of view what they seem to care most about." Id. Management consultant John Rapp calls this "perspective taking," i.e., looking at the world through an opponent's eyes. John Rapp, Perspective Taking, 14 EXECUTIVE EXCELLENCE 18, 18 (1997). He describes a conversation that illustrates its use:

I once asked sports "super-agent" Leigh Steinberg, "What skill makes a competent negotiator into a great one?" "That's simple," he said, "to find out how the world looks to the person across the table from me." Steinberg employs one person whose only job is to write "opposition briefs," detailing the opponents' best positions, and then suggesting "counters."

1. Determining Goals and Interests

Determining one's goals in a negotiation would appear to be a simple task, but it is not. In part, this is because people's personal desires often conflict to some degree. For example, one's goal of spending more time with his or her family might run headlong into an equally strong wish for promotion or a higher salary. Similarly, taxpayers notoriously demand more service from government at the same time they vote down bond issues or vote against politicians viewed as big spenders. This conflict requires, at a minimum, establishing and sorting priorities.

Determining goals also presents difficulties, because attaining them depends not just on what one wants, but on what the other side is willing to give. Thus, one's desire to pay a bargain price for a used Mercedes might meet strong resistance from the car's owner, especially if he or she has determined that the used car market values the car at a much higher price than the offer. In other words, having a goal serves no useful purpose for a negotiator unless there is a willingness on someone's part to satisfy that goal.

Even before announcing a specific position, one needs first to identify the underlying interest behind the position. As Roger Fisher and William Ury insightfully observe, reaching an agreement requires identifying and sharing interests before moving to specific steps to meet those needs.²⁹⁰ Identifying interests is probably where psychological traps and decision biases arise most frequently, because they involve feelings, impulses, and emotions.²⁹¹ When addressing needs and desires, there are clearly limits to rational assessments of what are inherently *non*-rational—as opposed to *irrational*—decision factors. After all, how does one logically assess a strong preference for blue cabinets or for Bob Dylan albums? What can be done, however, is to improve one's decisionmaking with respect to identifying and pursuing these preferences. On this point, Professor John Hammond and his colleagues argue that people often take too narrow a focus in identifying objectives, "omitting important considerations that become apparent only after they have

²⁹⁰ FISHER & URY, *supra* note 1, at 41 (describing the difference between "positions" and "interests" as follows: "[D]esires and concerns are *interests*. Interests motivate people; they are the silent movers behind the hubbub of positions. Your position is something you have decided upon. Your interests are what caused you to so decide."); *see also* URY, *supra* note 2, at 17 ("[T]he distinction is critical: Your position is the concrete things you say you want—the dollars and cents, the terms and conditions. Your interests are the intangible motivations that lead you to take that position.").

²⁹¹ Ury describes interests as arising from "your needs, desires, concerns, [and] fears" URY, *supra* note 2, at 17.

made a decision."²⁹² They suggest a five-step process for properly identifying objectives:

- 1. Write down all the concerns you hope to address through your decision.²⁹³
- 2. Convert your concerns into succinct objectives.²⁹⁴
- 3. Separate ends from means to establish your fundamental objectives.²⁹⁵
- 4. Clarify what you mean by each objective.²⁹⁶
- 5. Test your objectives to see if they capture your interests.²⁹⁷

In other words, one who seeks to identify his or her objectives needs to think of as many objectives as possible and compare them to each other as thoroughly as possible. Identifying one's own interests is only part of the planning process. One also needs to assess, as well as can be done, the likely goals and interests of one's opponent.²⁹⁸ Determining what one's opponent seeks enables a negotiator to develop ways to satisfy an opponent's interests in the most effective and least costly manner possible.

2. Seek Information Through Questions

In order to prepare properly for a negotiation, one must gather as much relevant information as possible. Although the Internet offers an expanded

²⁹² JOHN HAMMOND ET AL., SMART CHOICES: A PRACTICAL GUIDE TO MAKING BETTER DECISIONS 34–35 (1999) (suggesting that these missteps occur in large part because "people spend too little time and effort on the task of specifying objectives").

²⁹³ Id. Decisionmakers should "thrash about as much as necessary." Id. To do this, one should employ techniques such as: (1) compose a wish list; (2) think about the worst possible outcome; (3) consider the decision's possible impact on others; (4) ask people who have faced similar situations what they considered when making their decision; (5) consider a great—even if unfeasible—alternative; (6) consider a terrible alternative; (7) think about how you would explain your decision to someone else; and (8) when involved in a group decision, have each member follow the above suggestions individually and then compare notes. Id. at 36.

²⁹⁴ Id. ("The clearest and most easily communicated form for objectives is a short phrase consisting of a verb and object, such as 'Minimize costs,' 'Mitigate environmental damage,' and so on.").

²⁹⁵ Id. at 38.

²⁹⁶ Id. at 40.

²⁹⁷ Id. at 41. ("Having clarified each of your objectives, it's time to test them. Use your list to evaluate several potential alternatives, asking yourself if you would be comfortable living with the resulting choices.").

²⁹⁸ See supra note 289 and accompanying text.

source of data, which should be exploited as aggressively as possible,²⁹⁹ full data collection invariably requires asking the other side questions and preparing to be asked questions in return. Excellent negotiators thoroughly prepare for information exchanges with their opponents—identifying the information they seek, assembling the data they are willing to disclose, and developing responses to resist revealing matters they wish to keep confidential. The more information one gathers, the less likely he or she is to be sidetracked or misled by various psychological traps.³⁰⁰

3. Develop a BATNA

Negotiation biases can propel bargainers to accept deals that are suboptimal or, in the extreme, worse than no deal. Auto dealers know, for example, that prospective buyers who have invested time and effort to travel to a dealership will often settle for less than favorable terms simply to avoid having to drive to another lot to get a better deal.³⁰¹ Perhaps the greatest temptation is to fall prey to "sunk cost" thinking in which one justifies

²⁹⁹ The Internet provides negotiators *and* their opponents the opportunity to gain access to information about the other side, which obviously presents benefits and disadvantages. *See generally John J. McGonagle & Carolyn M. Vella*, The Internet Age of Competitive Intelligence (1999) (describing how to gather intelligence about competitors and how to deflect their intelligence-gathering attempts).

³⁰⁰ See Bazerman et al., supra note 7, at 1281. Having documented numerous negotiation biases in environmental negotiations due to the parties' strongly held beliefs and extreme distrust of one another, they note the great benefit of information exchange in producing exemplary agreements:

Would greater information exchange allow developers and environmentalists to generate wiser environmental agreements? Experimental negotiation research responds with a resounding "yes." In virtually every study, greater information exchange is positively related to improved negotiation performance. This is consistent with our intuitive sense that better informed negotiators and decision makers produce better negotiations and decisions.

Id. (citations omitted).

³⁰¹ See, e.g., Smart Maneuvers: How to Get the Right Car-Buying Information So You Can Take Control of the Deal, CONSUMER REP., Apr. 2001, at 24. Consumer Reports strongly advises prospective purchasers always to be ready to move to another dealership:

Be prepared to take a walk. Avoid pinning your hopes on only one car or only one dealer. If you do, you may not get the best deal. Keep your options open as long as you can. In our survey [of savvy consumers who read CR], 63 percent of the respondents said they visited more than one dealer to buy their latest car. And 41 percent said they'd visit more dealers and get more bids the next time they buy a car.

accepting a deal simply because one has invested so much time and money in seeking it. 302

One of the best ways of avoiding this psychological trap is to have a reasonable sense of what type of deal one will accept and what type of deal one will reject. To do that, one needs, as part of the planning process, to determine one's "walkaway point," i.e., the point at which rejecting a deal constitutes a superior alternative to taking the other side's best offer. Virtually all negotiation experts advise this, although they often use different terms such as "Best Alternative to a Negotiated Agreement (BATNA),"303 "Minimum Settlement Point (MSP),"304 or "Resistance Point (RP)."305 Whichever term one chooses, 306 the critical point in the concept is avoiding sunk cost thinking that otherwise would impel accepting a poor deal on the assumption that it is preferable to no deal.

D. Keep Negotiation Biases in Mind

Self-awareness can play an enormously beneficial part in decisionmaking and negotiating. Professor John Hammond and his colleagues argue:

[t]he best protection against all psychological traps is awareness. Forewarned is forearmed. Even if you can't eradicate the distortions ingrained in the way your mind works, you can build tests and disciplines into your decision-making process that can uncover and counter errors in thinking before they become errors in judgment.³⁰⁷

Knowing that, at times, one has a proclivity to deviate from a rational decisionmaking approach can help enormously in adjusting one's thinking

³⁰² See supra notes 221–26 and accompanying text.

³⁰³ See, e.g., URY, supra note 2, at 21–22 (stating that "[y]our BATNA is your walkaway alternative. It's your best course of action for satisfying your interests without the other's agreement").

³⁰⁴ See SCHOONMAKER, supra note 3, at 103 ("Your MSP is your bottom line, the worst deal you can live with. You goal should usually be the best deal you can get.").

³⁰⁵ See CRAVER, supra note 105, at 63 (defining "resistance point" as "minimum terms you would accept given your alternatives to a negotiated settlement").

³⁰⁶ Although the term BATNA is undoubtedly the most widely used, the author uses it reluctantly because it seems to conflate two concepts that he prefers to keep separate. One is the notion of "walkaway point," i.e., the point at which no deal is better than the proposed deal. The other is "fall-back position," i.e., what one plans to do instead of the rejected deal. Although the concepts logically go together, they are distinct considerations.

³⁰⁷ See, e.g., HAMMOND ET AL., supra note 292, at 214–15.

and action to avoid the unwise approach. Just as prior experiences inform our future actions, empirical information affects how we make decisions and undertake negotiations. To return to a renowned example, one should remember the Dollar Auction, the bidding game that effectively "entraps" participants in an auction into bidding amounts far in excess of the value of a single dollar bill. Why, one asks, would someone play a game in which he or she is almost always guaranteed a loss? The answer is that the participants typically cannot foresee the complex psychological drives—greed, fear of losing face, urge to win, and desire to exact revenge—that kick in to impel highly irrational behavior. Provided with critical information about the specific pitfalls of the Dollar Auction or with general information about the psychological pitfalls, however, few people will fall prey to this enticing game 310—or other, similar traps. 311

The notion that awareness of biases can lead to successful strategies for avoiding psychological traps extends to other realms of human behavior, such as runaway emotions.³¹² For example, one who knows that he or she has a hair-trigger temper that sabotages negotiations can take steps to identify

People who remain in the auction past the \$1 bid... typically stick with it to the bitter end—until they have exhausted their resources or their adversary has quit. Interpersonal motives come to the fore when the bid exceeds the objective value of the prize. Even though both players know they are sure to lose, each may go out of his or her way to punish the other, making sure that the other person loses even more, and each may become increasingly concerned about looking foolish by yielding to the adversary's aggression.

Id. at 165.

³⁰⁸ See supra notes 213-15 and accompanying text.

³⁰⁹ See Jeffrey Z. Rubin, *Psychological Traps*, in NEGOTIATION: READINGS, EXERCISES & CASES, supra note 1, at 160, 164 (citing research on the Dollar Auction that identifies these and other motivators). According to Rubin, greed entices bidders to enter the auction, but once they see that coming in second will produce only a humiliating loss and no gain, they begin escalating the bids. *Id.* According to Rubin:

³¹⁰ The author can attest to this from first-hand experience. Once, in front of a class of roughly 60 students, I was unable to find a single person willing to bid even a penny for the dollar. "Forget it," one student wryly announced. "We just got fleeced by our finance professor."

³¹¹ See Rubin, supra note 309, at 167 (noting that "[o]ur studies also show that being forewarned about one kind of trap, moreover, can put people on guard against other kinds of traps").

³¹² See, e.g., GOLEMAN, supra note 286, at 48 (describing how self-awareness provides the basis for managing emotional outbursts—"when [people with good self-awareness] get into a bad mood, they don't ruminate and obsess about it, and are able to get out of it sooner. In short, their mindfulness helps them manage their emotions.").

personal warning signals and cues that unleash tantrums. Armed with this knowledge, the person can often apply effective behavioral modification techniques to minimize or avoid the lost temper.³¹³

Although a powerful technique for combating psychological traps, self-awareness, by itself, does not always guard against foolish actions. Indeed, one would find it surprising that emotional pathways and thought patterns hard-wired by millennia of evolution could invariably be offset simply by the awareness that we are programmed to act in certain ways. Knowing that an egocentric bias disposes us to interpret events in a manner that unduly favors our interests does not necessarily provide an effective antidote to this bias. Similarly, knowing that we often rearrange events from hindsight to make ourselves look wiser or more prescient than we actually were at the time typically fails to reduce this all-too-human tendency. In fact, many of the decision biases produce pressure to act in ways that we genuinely wish to avoid. So powerful is the principle of reciprocity, for example, that it leads us to invite a neighbor or co-worker to dinner in response to an invitation to dine at his or her house—even when we dislike the person whom we invite. In the sum of the sum of the person whom we invite.

Wary negotiators should not abandon hope upon hearing that decision biases can operate despite our knowledge and awareness of their existence. Recent studies applying more sophisticated and powerful approaches have shown a greater ability to neutralize and offset our biases.³¹⁷

³¹³ See, e.g., Norman E. Rosenthal, THE EMOTIONAL REVOLUTION: How THE NEW SCIENCE OF FEELINGS CAN TRANSFORM YOUR LIFE 228–38 (2002) (describing a ten-point program for anger management: Step 1: Recognize that your anger is a problem; Step 2: Monitor your anger level; Step 3: Look for a pattern; Step 4: Take a time-out; Step 5: Challenge perceptions and thoughts that fuel your anger; Step 6: Dig deeper to understand the roots of your anger; Step 7: Change the messages you give yourself; Step 8: Use exposure and relaxation; Step 9: Use humor; Step 10: Listen to your Limbic news—and act appropriately).

³¹⁴ See, e.g., Birke & Fox, supra note 7, at 19 (noting that "[r]esearch suggests that egocentric biases may be very difficult to eliminate").

³¹⁵ See, e.g., Peters, supra note 167, at 1285 (noting that early efforts to eliminate the hindsight bias by warning subjects about the bias and encouraging them to be more aware failed to reduce or eliminate it "because the biasing process is largely subconscious and automatic").

³¹⁶ See CIALDINI, supra note 12, at 21 (observing that the principle of reciprocity "possesses awesome strength, often producing a 'yes' response to a request that, except for an existing feeling of indebtedness, would surely have been refused").

³¹⁷ See infra notes 318-37 and accompanying text.

E. Use "Devil's Advocate" Techniques

In the Middle Ages, candidates for sainthood would be represented before the papal court by two spokesmen, the "advocatus dei," who would make the strongest case for canonization, and the "advocatus diaboli," who would present all conceivable arguments against the proposed action.³¹⁸ In modern parlance, a devil's advocate is one who raises arguments against a proposed course of action to help determine whether it is sound.

Devil's advocacy can reduce bias in negotiation, especially in the planning phase and in dealing with egocentric biases. 319 Given that negotiators are overly inclined to view the merits of a claim in ways that unconsciously tilt toward themselves, forcing them to confront the legitimate claims of the other side goes a long way to balancing the default setting in favor of themselves. Playing devil's advocate against egocentric bias is particularly important given its seeming intractability.³²⁰ Moreover, given the difficulty in dealing with difficult negotiators' biases, playing devil's advocate with oneself may be insufficient. What may help more than a solo venture in deviltry is including a trusted employee or colleague to play the skeptical role as vigorously as possible.³²¹ In such cases, the essential element is for the devil's advocate to be as blunt and honest as possible in order to offset the natural bias in one's favor. As Birke & Fox note, companies involved in high stakes litigation take the need for objective information so seriously that they may hire a test jury to hear the case and render a mock judgment to gain a disinterested perspective.³²²

F. "Hide the Answer"

In cases where wishful thinking or hindsight bias might lead one to "fudge" data to confirm a preconceived idea, scientists have devised an

 $^{^{318}}$ William Morris & Mary Morris, Morris Dictionary of Word and Phrase Origins 176 (1988).

³¹⁹ See infra note 320 and accompanying text.

³²⁰ See Birke & Fox, supra note 7, at 19 (noting research suggesting that "egocentric biases may be very difficult to eliminate").

³²¹ Politicians preparing for debates often use this technique, employing trusted advisors to play the role of their opponents in mock debate sessions. Such sessions help expose poor information and ineffective arguments. *See, e.g.*, DAVID A. STOCKMAN, THE TRIUMPH OF POLITICS: THE INSIDE STORY OF THE REAGAN REVOLUTION 48–50 (1986) (describing his role in preparing candidate Reagan for a presidential debate).

³²² Birke & Fox, *supra* note 7, at 19 (noting that many experts recommend the use of test juries to play the role of devil's advocate).

approach that "hid[es] the answer" in ways that force extreme intellectual honesty.³²³ What the scientists do is program their computers to add unknown numbers called "offsets" to their data to make the outcome of their analyses blind. Only when an experiment is over do the researchers open their "metaphorical" sealed envelopes and discover the value of the offset.³²⁴ The benefit of this approach is that scientists never fall prey to the temptation to make adjustments or "corrections" in their data during the experiment to correspond to what they believe the results should be.³²⁵

In some circumstances, negotiators might benefit from variations on this technique. For example, one using an agent to make a purchase, such as in a real estate transaction, might withhold from the agent the actual price at which the principal would make a deal. This would avoid any tendency on the agent's part to stop pressing for concessions once the price fell within the range of acceptability for the principal.

G. General Legal Tools: Apply Reasoning From the Law of Evidence

Given the many centuries in which the law has pondered questions regarding the admissibility of evidence to show the truth, relevance, and materiality of litigants' cases, it would be surprising, indeed, if some of the rules of evidence did not offer a number of helpful ways of avoiding decision bias.³²⁶ In particular, negotiators with a legal background would do well to keep in mind a number of critical legal principles, such as:

³²³ See James Glanz, New Tactic in Physics: Hiding the Answer, N.Y. TIMES, Aug. 8, 2000, at F1 (describing the new technique as a way to help scientists "overcome their problems with particle 'discoveries' that turn out to be wishful thinking and with conflicting results that take decades to resolve").

³²⁴ Id.

³²⁵ Id. (noting that "[h]uman bias has a long, unhappy history in scientific research"). Scientists who have reviewed some of the greatest discoveries in history, such as Gregor Mendel's data on heritable traits or Sir Arthur Eddington's measurements of the deflection of starlight over the edge of the sun, have discovered substantial "fudging" of the data to produce results consistent with their intuition rather than honestly reporting the results. Id.

³²⁶ The law of evidence is primarily designed to help decisionmakers arrive at as close an approximation to the truth as is possible to fallible human beings. See, e.g., PAUL F. ROTHSTEIN, EVIDENCE IN A NUTSHELL: STATE AND FEDERAL RULES 1 (2d ed. 1970) (noting that the rules of evidence provide "useful insights into how minds come to accept propositions of fact as true"); CHESTER H. SMITH, EVIDENCE FOR LAW SCHOOL AND BAR EXAMINATIONS 1 (Howard M. Rossen & Wilton S. Sogg eds., rev. ed. 1970) ("The primary purpose for rules of evidence is to arrive at the truth.").

- Weight of Evidence: When one is involved in a negotiation, one would do well to decide how much weight to accord propositions advanced by one's opponents. Lawyers are well qualified to assess burdens of proof such as "preponderance of the evidence," "327 "clear and convincing evidence," 328 and "beyond a reasonable doubt." 329 Although these terms do not have precise contours, they carry the clear implication that different propositions require different degrees of proof. Depending on the circumstance, one would do well on occasion to hold an opponent's statements to a particularly high standard of proof. 330
- Burden of Proof: The person advancing a proposition typically has the burden of proving it.³³¹
- Relevancy: Evidence is relevant when it renders a fact in dispute more probable than it would be without the evidence.³³²
- Nature of Evidence: Other things being equal, evidence arising from one's personal experience is more credible than that related by another.

Negotiators would do well in bargaining by keeping in the back of their minds the notion that propositions they wish to advance or arguments made to them by their opponents should be tested against the principles for provenance contained in the rules of evidence. Given the restrictive nature and occasional irrationality of the rules of evidence, one would be foolish to apply them in any mechanical fashion to arguments advanced in negotiation

³²⁷ See CHARLES T. MCCORMICK, HANDBOOK OF THE LAW OF EVIDENCE 677 (1954) (noting that "proof which leads the jury to find that the existence of the contested fact is more probable than its non-existence").

³²⁸ Id. at 679 (This is a more demanding standard of proof. No precise formulation has been universally agreed to other than "the truth of the contention is 'highly probable."").

³²⁹ Id. at 682 (Applied in criminal cases, it requires the highest degree of certainty. A jury must acquit "if they have a reasonable doubt of the defendant's guilt of the crime charged").

³³⁰ The weight of evidence should bear some relation to the importance of the proposition being advanced. In the case of extraterrestrials, for example, the late astronomer, Carl Sagan, used to say, "Extraordinary claims require extraordinary proof." Positive Atheism's Big List of Carl Sagan Quotations, at http://www.positiveatheism.org/hist/quotes/sagan.hm (last visited Apr. 4, 2005).

³³¹ MCCORMICK, *supra* note 327, at 636 (noting that the burden of proof is "usually cast first upon the party who has pleaded the existence of the fact . . . ").

³³² See id. at 317.

settings.³³³ Nonetheless, keeping in mind the likelihood of a judge admitting the evidence that one's opponent offers or that one intends to use to convince the other side may well provide a kind of disinterested scrutiny that helps one avoid decision bias.

H. Specific Legal Tools: Contingent Contracts, Settlement Escrow, and Final Offer Arbitration

Depending on the circumstances, some specific legal tools can reduce negotiation and decision biases, especially those related to over-optimism, anchoring and egocentrism. They do so by offsetting the biases of the opposing parties or by forcing the parties to view issues in a more objective fashion.

1. Contingent Contracts

Assume, for example, that a star professional athlete believes that he or she deserves a dramatic increase in pay after a particularly successful season. The team's owner, on the other hand, worries about the precedent of a large pay increase, and about the star's staying power over the next season or seasons. Each side may well exert considerable leverage over the other. The athlete, if eligible for free agent status or if willing to endure a season without playing, may demand an extremely large increase in pay given the short professional career of most athletes. The owner, on the other hand, may believe that no other team will value the athlete's talent as highly as the athlete does and may be able to foreclose the athlete's departure from the owner's team (if the athlete is not eligible for free agent status).

One of the biggest confounds in the professional athlete's contract negotiation is that, although the parties might be able to reach an agreement about how to price a specific performance by the athlete, they do not know in advance how the athlete will perform during the next season. Each side, responding both to the tendency towards over-optimism and towards viewing

³³³ Rules that bar highly credible evidence from juries because of its inflammatory or prejudicial nature ought to be analyzed for its probative value notwithstanding the law's inclination to bar it from admission before a jury. For example, evidence relating to a person's general "character" is typically limited in trials for fear that juries will read more into the evidence than is warranted by the facts. See id. at 86 (noting that the tendency is to use character evidence "more and more sparingly"). On the other hand, negotiators on the verge of entering into an agreement with an opponent would likely want as many details of a person's character as possible.

the situation from its egocentric perspective, might enter the negotiation with wildly different assumptions about the future performance of the athlete.

One solution advanced by Professors Bazerman and Gillespie is for the parties to craft a contingent contract, 334 i.e., one where the amount of pay varies according to the athlete's actual performance. For example, if the athlete scores a certain number of goals, leads the team to a championship, or draws a certain level of attendance, his or her pay might be increased. The benefit of such an approach is that negotiators bet on the future rather than argue about it. Athlete than seeking to convince the athlete that he or she is not as good as the athlete believes, the team owner can say If you can do what you think you can, I'm delighted to pay you for that achievement, but you have to perform up to your predictions in order to be paid that amount.

If, on the other hand, the owner is being unreasonably pessimistic about the athlete's potential, a contingency that rewards the athlete for a specific performance effectively reduces any biased thinking that the owner might carry regarding the athlete's chances during the next season.³³⁷

2. Settlement Escrow Offers

Deciding whether or not to make the first offer in a negotiation is a challenge to bargainers. Most negotiation experts counsel caution in doing so because of numerous perceived pitfalls: demonstrating ignorance, ³³⁸ seeking

³³⁴ One might also describe such an agreement as a "conditional" contract. Calamari and Perillo describe a condition as "an act or event, other than a lapse of time, which, unless the condition is excused, must occur before a duty to perform a contractual promise arises" JOHN D. CALAMARI & JOSEPH M. PERILLO, THE LAW OF CONTACTS 397 (4th ed. 1998). The examples described in this section are clearly conditions precedent. *Id*.

³³⁵ See Bazerman & Gillespie, supra note 158, at 156 (describing a contingent contract as one in which the "terms are not finalized until the uncertain event in question—the contingency—actually takes place").

³³⁶ Id

³³⁷ Id. at 157.

By their nature the biases are difficult to root out—they're embedded in the way the human mind works. Contingent contracts offer a different approach to solving the bias problem. By enabling each side to bet on its bias, the contracts remove the biases as sources of contention and ultimately have the effect of canceling the altogether.

Id.

³³⁸ Professor Shell cites the case of novelist Raymond Chandler, who negotiated with a Hollywood director and producer, demanded \$150 per week, and warned that he might require two to three weeks to produce a script. The Hollywood officials reacted

unduly modest agreements,³³⁹ or, conversely, demanding insultingly large amounts.³⁴⁰ As a result, many experts advise astute negotiators not to make the first offer.³⁴¹ Notwithstanding these views, recent research suggests, however, that making first offers can markedly improve one's outcome through the strategic use of anchoring.³⁴² So powerful is the anchoring effect at times that "[e]ven when people know that a particular anchor should not influence their judgments, they are often incapable of resisting its influence."³⁴³

One who appreciates the power of anchoring may still wish to avoid making the first offer in a given negotiation because he or she remains mindful of the pitfalls of doing so.³⁴⁴ One who finds himself or herself in that position should consider a technique developed by professors Robert Gertner and Geoffrey Miller called settlement escrows as an alternative approach.³⁴⁵ Under this approach, parties in litigation who find themselves at an impasse about which of them is to make the first offer can turn to an "escrow agent"³⁴⁶ to receive each side's offer in confidence. The escrow agent then

with amusement at Chandler's naiveté, knowing that they were prepared to pay five times as much and that most movie scripts took months, not weeks, to write. See SHELL, supra note 1, at 158.

³³⁹ Brian Epstein, manager of the Beatles, committed this error. When negotiating for the group's financial share of their first movie, *A Hard Day's Night*, he led with what he considered an aggressive demand of 7.5% of the movie's profits. The producers, who had been prepared to pay up to 25%, readily agreed. *Id.* at 158.

³⁴⁰ One who does this may go so far outside the other side's range of acceptable offers that the opponent simply terminates the negotiation, assuming that agreement is impossible.

³⁴¹ See, e.g., CRAVER, supra note 105, at 57 (noting that most negotiators prefer to have their adversaries articulate their opening positions first); DAWSON, supra note 105, at 125 (advising that negotiators should "get the other side to state a position first"); SCHOONMAKER, supra note 3, at 74 (advising negotiators to "[t]ry to get the [other side] to make the first offer"); SHELL, supra note 1, at 157 (noting that, while he disagrees, many experts "say you should never open").

³⁴² See supra notes 102-14 and accompanying text for a discussion of anchoring.

³⁴³ See Adam D. Galinsky, Should You Make the First Offer?, 7 NEGOT., July 2004, at 3, 3 and studies cited therein.

344 See supra notes 338-40 and accompanying text.

³⁴⁵ Robert H. Gertner & Geoffrey P. Miller, *Settlement Escrows*, 24 J. LEGAL STUD. 87 (1995).

³⁴⁶ Gertner and Miller suggest that the clerk of the court could easily and cheaply fill this function, but any mutually acceptable person could suffice. *Id.* at 88. In fact, one can go to the Internet to get a computer program to play the role. *See* Mark Howland,

examines the two offers to determine whether they cross, i.e., whether the buyer's offer exceeds the seller's bid. If the two prices do not cross, the agent—without revealing either side's offer—informs the parties that there is no overlap between the offers. The parties are then free to continue bargaining or to withdraw from the negotiation. Each has learned that his or her offer was unacceptable to the other party, but neither has been "anchored" by the other.

If the escrow agent determines that the two offers overlap, the agent then notifies the parties of the overlap. In most cases, the agent will assign agreement at the midpoint between the two numbers. For example, if the seller puts in a price of \$120 to sell a widget and the buyer inputs a figure of \$160, the midpoint deal will be struck at \$140.348

Settlement escrow allows the parties to put forward their "bottom line" offers in ways that more back-and-forth negotiation does not. In settlement escrow, one generally either makes a deal at a point that one believes to be fair or makes no deal without revealing any vital information.³⁴⁹

One might ask what would prevent a party from putting an extremely aggressive offer in the settlement escrow process to test whether the other party really understands the proper valuation of the deal, and then moving to a more modest claim if there is no overlap in the parties' positions. The simple answer is that settlement escrows typically run only one exchange of offers. If one does not put a reasonable offer out, one likely loses the ability to use the process to make a deal. Of course, it is always possible for the parties to agree to run another exchange of offers, but providing the

Settlement Escrows: A Negotiation Tool, at http://mayet.som.yale.edu/coopetition/java/bidask.html (last visited Feb. 18, 2005).

³⁴⁷ See Gernter & Miller, supra note 345, at 96–97 (citing studies of the anchoring effect that demonstrate "more aggressive initial offers tended to correlate with better success on the merits...").

³⁴⁸ See Howland, supra note 346.

³⁴⁹ A web site devoted to settlement escrow describes the benefit as follows:

Settlement escrows allow people to negotiate from behind a veil. Ordinarily, when you make a demand, you reveal your hand. Settlement escrows preserve the fog. You can say what you really need without giving away much information. When the parties in a negotiation feel safe enough to make reasonable demands, they're much more likely to reach an agreement. There's a much better chance that whenever there's a mutually beneficial deal to be made, it will be made.

possibility of multiple offers substantially diminishes the possibility of agreement in the early stages of negotiation.³⁵⁰

3. Final Offer Arbitration

Another tool that might help in avoiding negotiator bias is final offer arbitration (FOA). The specific bias that FOA can address is over-optimism, i.e., the egocentric tendency on the part of negotiators to assume that their point of view is likely to prevail in a bargaining session.³⁵¹ Final Offer Arbitration was first suggested in 1966 by Professor Carl M. Stevens as a way of discouraging parties involved in arbitration proceedings from taking extreme positions.³⁵² In conventional arbitration, the arbitrator has the choice of splitting the difference between the parties, thereby creating incentives for the parties to propose settlements at the extreme end of the spectrum with the hope that splitting the difference will give them an advantage in the final award.³⁵³ Professor Stevens' response was to propose Final Offer Arbitration to chill this effect.

Essentially, FOA operates by requiring the arbitrator to select one of the two submitted offers without compromising between them.³⁵⁴ A moment's reflection reveals why this approach forces the parties to be more realistic in

From a theoretical viewpoint, the most interesting implementation issue may be how often offers into the settlement escrow can be revised. If the litigants do not learn new information in the pretrial stages, the answer is easy. There should be a single opportunity to make escrow offers, and if the offers do not cross, there is no opportunity to try again. One way to think about this is to assume, to the contrary, that there is an opportunity for each side to revise its offer, should there be no settlement in the first escrow. Now, the incentives to make a reasonable offer in the first settlement escrow are much weaker. A litigant may reason that it can make an aggressive offer in the first escrow, in the hopes that it may be settled anyway, and only make a reasonable offer in the second round.

³⁵⁰ See Gertner & Miller, supra note 345, at 115. As the authors state:

Id.

³⁵¹ See supra notes 160-73 and accompanying text.

³⁵² Carl M. Stevens, *Is Compulsory Arbitration Compatible with Bargaining?*, 5 INDUS. REL. 38, 42 (1966).

³⁵³ See, e.g., Daniel R. Marburger, Arbitrator Compromise in Final Offer Arbitration: Evidence from Major League Baseball, 42 ECON. INQ. 60, 60 (2004) (noting that "[c]ritics have argued that [in conventional arbitration] arbitrators split the difference between the offers to enhance their chances of being rehired in future cases. This gives each bargainer an incentive to submit an extreme offer to increase its expected gains from arbitration.").

³⁵⁴ Id

their submissions. Given the arbitrator's lack of authority to split the difference, the arbitrator is forced to select the offer that he or she believes to be the more reasonable. Parties who take an unreasonable or extreme position will inevitably be the loser in the submissions to the arbitrator.

Any negotiator who submits to an FOA procedure will quickly learn the hazards of over-optimism in bargaining. Faced with the need to forecast which offer an arbitrator will likely choose, the prudent negotiator will do his or her best to look at the dispute through the eyes of the arbitrator, not through the rosy prism of his or her egocentric perspective. Major League Baseball adopted FOA in 1973 and has used it successfully ever since.³⁵⁵ FOA has also been used in other labor settings.³⁵⁶

One can posit the use of FOA in a negotiation setting where he or she is convinced that the other side either has deliberately (and cynically) adopted an extreme position or has proffered an offer steeped in over-optimism. One way to break an impasse over terms that one deems to be too extreme is to propose that either party submit the dispute to FOA. Such a proposal sends a strong signal that one is completely secure in his or her offer and believes that the other side either is bluffing or naïve. In either instance, such a proposal might well force the other side to take a cold, hard look at their position. Even if the other side rejects the proposal, one likely will have put them on the defensive and may well pressure them to move from their position.

VII. CONCLUSION

Having analyzed the possible pitfalls negotiators face in decisionmaking, one might be tempted toward pessimism regarding the possibilities for optimizing his or her performance in bargaining. It certainly seems true that virtually any deal one negotiates, if subject to extensive hindsight analysis, might seem sub-optimal in one or more particulars. Reviewing past decisions is certainly a worthwhile endeavor if it improves future decisions. On the other hand, one needs to avoid "paralysis by analysis" pessimism.³⁵⁷

³⁵⁵ Paul D. Staudohar, *Baseball Negotiations: A New Agreement*, 125 MONTHLY LAB. REV., Dec. 2002, at 15, 16.

³⁵⁶ See, e.g., Final Offer Arbitration, Canadian Transportation Agency, available at http://www.cta-otc.gc.ca/rail-ferro/arbitration/foa_e.html (last visited Feb. 18, 2005).

³⁵⁷ George Washington put it best, "We ought not to look back unless it is to derive useful lessons from past errors, and for the purpose of profiting by dear-bought experience." World of Quotes.com: Historic Quotes and Proverbs Archive, available at http://www.worldofquotes.com/author/George-Washington/1/index.html (last visited Apr. 18, 2005).

A more optimistic perspective is to understand that humans, as fallible beings, are programmed to process copious amounts of data and make quick decisions that balance speed against in-depth analysis. On balance, humans tend to do a creditable job. This article has explored several approaches that will tend to improve one's decisions. None will produce perfection, but, within human constraints, they seem likely to help avoid the worst types of errors.